Clinical Lecture
ON
BURNS AND SCALDS.

Delivered at University College Hospital,

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GENTLEMEN,—You will remember that when we went round last Friday week you saw a child who had just been admitted into No. 5 ward with very bad scalds of the body, and I took the opportunity of pointing out to you that the child had really recovered from the first shock of the injury when we saw it two hours after the accident, and was not in the least collapsed. I proceeded at once to dress the case, but you will remember that, notwithstanding all our care, the patient died two or three days afterwards, and we saw the result of the necropsy this day week. That is only one of a number of cases which come into the hospital during the winter from either burns or scalds, and it is therefore convenient to say a few words to you on the treatment of these cases at the present time.

In the first place, what is the difference between a scald and a burn? They are both, of course, the effects of heat; but a burn is the effect of dry heat—flame; and a scald is the effect of moist heat. But if you have liquid metal, like molten lead or iron, you will find that it produces exactly the same effect as a burn; and some of the most terrible accidents that you will see, if you have to do with mining countries, will be in the cases of patients who accidentally get their feet into molten iron, so that they are charred or burned off, when of course secondary amputation has to be performed.

Then with regard to the mode of treatment of a burn. You may, in private practice particularly, see the cases almost immediately after the burn, and you will find that all these patients suffer from shock, usually in a marked degree. The shock is due not merely to the effect of the burn, but to fright. There is nothing more alarming to women than to find their clothes on fire, and the tendency is to rush screaming out into the street, which is the worst possible thing for them to do. If you ever have to deal with such a case, I would recommend you at once to throw the sufferer down and roll her in a thick rug, a great coat, or anything of the kind, which will put out the fire immediately. Having thus stamped it out, you can proceed to treat the burn. Of course in a hospital we do not get cases so soon; they are brought here a little after the burn, and generally still more or less in a state of shock. Now, let me warn you against treating the local injury instead of treating the shock. If you treat the local injury, there is an elaborate dressing, with more or less exposure of the person necessarily; you thus increase the shock, and may very likely kill the patient. The proper method is not to treat the local injury at all at first, but to treat the shock by restoring warmth to the body, by wrapping the child in a hot blanket, putting it in front of the fire with hot bottles to its feet, giving a little hot brandy-and-water or something of the kind by the mouth (even an infant will bear a few drops of brandy, particularly while reaction is coming on), and giving a little opium to relieve the pain, for there is no injury more agonising than a severe burn on the skin, and as long as the pain lasts the shock will be kept up. As soon, therefore, as reaction shows itself, it is wise to give laudanum, and you may give it to children, but you should be cautious about the dose. The usual rule is one drop of tincture of opium for every year of the child's age; but you may give more than that if you are careful in breaking up the doses. What I do in the case of these young children generally is to put five drops of laudanum into an ounce of water, and then tell the sister of the ward to see that they have a teaspoonful every hour or two according to the circumstances of the case. Repeating these small half-drop doses is much better than giving larger doses, which may produce dangerous narcotism.

But supposing that the patient does not die from the immediate effect of the accident but rallies from it, and you have to treat the case, what are the indications for treatment? They of course vary according to the severity of the injury. And here we come at once to the classical classification, as we may call it, of Dupuytren, usually given in books. I mean those six degrees of severity of burns. That is all very well, but in practice it is quite sufficient to have three divisions. The point for you to determine is this: is it simply a scorch such as you may get from an explosion of gas; or is it something more severe, leading to vesication (which is the condition in which you saw the child the other day, and is the common condition of scalds); or is it something more severe still—a charring which can only occur from the application of dry heat, actually scorching up and burning the part? Those three degrees are practically all that you require. I quite allow that charring may be very different in different cases. You may have a merely superficial burning of the skin, or the muscles may be scorched, and the whole tissues of the limb burnt up and the limb destroyed. Upon those degrees Dupuytren founds three of his divisions, but practically, as I have said, it is quite enough to remember that you may have a superficial burning, or a burning with vesication, or a burning with an eschar, which is the most severe.

First, then, is the superficial burning, as in the case of a foolish person searching for an escape of gas with a light, and getting an explosion of it in his face. There is a good deal of scorching and of course a good deal of pain. Perhaps before you have seen the case it has been powdered over with flour, and that is not at all a bad application. But you may see it before that, and if it has not been powdered there are various things that you may apply. Any greasy application is good, but those things are rather inconvenient on the face, and for face burns I think a very convenient application is a mixture of collodion and castor oil. The castor oil supplies the greasy portion, and the collodion mixes well with it. The proportion is generally one of collodion to two of castor oil, to be painted upon the face. It does not set firmly like ordinary collodion, but it sets sufficiently to hold its place and to protect the skin from the air, which is the great point, and at the same time without any injurious or uncomfortable pressure upon the part. Then, again, nitrate of silver painted upon the burn is very good, only it smarts severely for the moment. The late Mr. Skey was very strong in his advocacy of that, and it is not at all a bad remedy if you apply it in suitable cases. In the case of small superficial burns, a ten-grain solution will make a good application, or you may employ what is to be found in a great many houses (at least used to be)—the nitrate bath of the amateur photographer. Of course, the nitrate turns the part black, and you must prepare the friends for that; but it forms a little superficial eschar all over the burnt surface, and in that way protects it from the air.

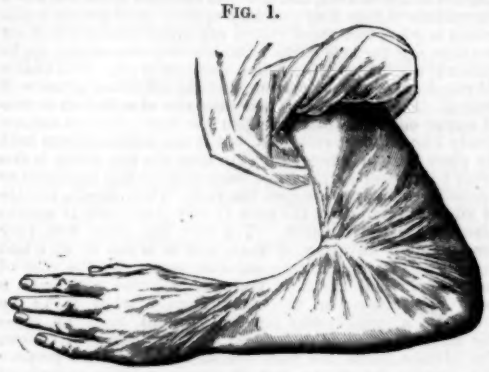
Then take a case such as that which we saw last Friday week, where vesication has already been produced. What are these vesications, and what do they contain? It is not merely serum; if it is serum, it has got some fibrinogen in it, for if you leave it the material which is exuded becomes solid, and you may see every now and then in the surgery a patient who has had a scald some days before, and treated it domestically, and who has come here with a mass of coagulated albumen beneath a large bleb of cuticle. Now, it is important not to let that coagulation take place, because it is difficult to treat. The proper plan—the one which you saw me adopt the other day—is to snip the vesicles in a depending position, pat them down, carefully preserving the cuticle on the surface beneath, and then apply carbolic oil. Another very good dressing is the boracic ointment, which has the advantage of being greasy, and is to a certain extent aseptic.

Then we come, lastly, to the case where there are eschars; there we have a burnt surface which is clearly destroyed, and of course time must be given for the slough to come away. Now comes the great point of preserving the patient as far as possible from the risks of pyæmia. No doubt in former times many of these cases of severe burn died in a week or ten days after the injury from pyæmia; that is, they were allowed to lie in a bath of pus of their own formation, and then some deleterious matter contained in it became absorbed, and in that way the patient got pyæmia and died. The great thing is to guard against that by using absorbent

dressings, and at the same time dressings which shall be antiseptic as far as possible. Here, again, we may use carbolic oil as a dressing next the surface, and over that plenty of cotton wool—it may be the salicylic wool—in order to absorb the fluid. So also in extensive surface burns it is good to dust a little iodoform upon them, treating them as you would any other surfaces which you want to keep sweet and at the same time to get the fluid absorbed. Where sloughs are hanging fire and do not seem likely to separate, poulticing for about twenty-four hours will not do any harm, particularly if you sprinkle a little iodoform on the poultice. When the sloughs have come away, and you can assist them by snipping little bits of dead tissue with the scissors and pulling them away with the forceps, you find beneath a large granulating surface, which may be more or less healthy or may be somewhat flabby, when you can bring it into a healthy condition by stimulating lotions. It is in the treatment of these cases that the greatest trouble is found. An ordinary superficial burn heals without any great difficulty, but when once you have destruction of skin you cannot be too careful in the after-treatment, because, unless you watch the case for weeks and months, you will perhaps find that in the end a terrible cicatrix has formed, which you are blamed for, although it may be from no fault of yours.

What commonly happens is this: You have got, we will say, a burn on the arm, and you are taking great pains with it. You are getting away the slough, and you are producing a nice granulating surface. You put a splint on the back of the elbow, and you let the surface granulate up gradually and slowly. Then you lose sight of your patient

FIG. 1.



for a time, and after some weeks he comes back with a beautiful web stretching across from the upper to the lower arm. (Fig. 1.)[1] He has got tired perhaps of your treatment, and has gone to some old woman or quack, who has said to him, "Leave off your splint, bend the arm, and it will soon get all right." The arm has been bent and the cicatrix has been rapidly formed, and when you see the case again there is a web stretching from one part of the limb to the other, the result being very disastrous to the patient. I have here photographs of cases of that kind; and here is another on the neck. (Fig. 2.) Those are the most serious cases of all where the neck has been badly burnt and where you have cicatrices drawing down the lip.

In all those cases where you have extensive burns to deal with, you must have great patience in the treatment. They are cases which remain in the hospital for months together; they wear out the house-surgeon, the dressers, and the nurses; and yet they are worth attending to, because, unless you are careful, they are sure to do you discredit. The great secret is to superintend the granulating wound, and keep it on the stretch while it is healing. You cannot have a better example of this than the one which I mentioned just now of the arm. If you have a granulating surface in front of the arm, there must be a splint put on the back of the elbow, and the patient must wear it for six months. It is the same with the neck: if there is a granulating wound, the result of a burn, you must keep the child's head constantly stretched over the pillow till the wound granulates up; and even then it is well to have some form of apparatus by which you can keep the cicatrix constantly on the stretch for months afterwards; because it is not merely the healing that you have to consider, but it is the after-contraction of the cicatrix that is so serious. You must bear in mind that, although the case may look very nice, if you let it go without attention, in six months it may come back in a terrible state, and you will be blamed for it.

FIG. 2.

But supposing that, unfortunately, the cicatrix has been allowed to contract and the case comes to you for treatment, a good deal may still be done. Here is an example in a photograph (Fig. 3) of a child in whom the lip was entirely drawn down—turned, as it were, inside out; and here is also a photograph (Fig. 4) of the child taken after treatment. The operation I performed here was that suggested by the late Mr. Teale of Leeds, and you will find it described in Mr. Erichsen's "Surgery," with a diagram which I will

FIG. 3. FIG. 4.

reproduce on the black-board. The everted lip was divided into three parts by two vertical incisions, the central portion being equal to half the width of the lip, and the lateral portions taking each a quarter. From the lower end of each vertical cut an incision was carried to an inch beyond the angle of the mouth, and the two flaps thus marked out were dissected up and brought together in the middle line, being fixed upon and supported by the central portion of the original lip, from which the everted mucous membrane was dissected off. The everted eyelids also were improved by making a V incision below them and dissecting them up so as to convert the V into a Y, with the result of pushing the lids up considerably. In cases of recent burn it is well to make the edges of the lids raw and stitch

[1] Figs. 1 and 2 are taken from Fergusson's "Practical Surgery," by permission of Messrs. Churchill.

them together, to prevent if possible the unsightly eversion which is likely to follow.

When you get extensive burns about the neck, the difficulty is how to fix the parts. You have here represented in a photograph a plan which I carried out, and which I think is rather useful. The case was that of a boy who was in the hospital in 1876–77. He had, as you see, a contracted arm and neck. You see also that his head was shaved, and the reason was that I found that the only way to make a traction upon the cicatrix was to take strips of plaster up to the top of his head and to fix them to the scalp. The instrument makers make all sorts of apparatus for these cases, but they are all more or less unsatisfactory, and the reason is this: the tendency of them all is simply to pull open the cicatrix in one direction. What you want, however, is to stretch the cicatrix, which requires a great deal of ingenuity, and the best way to do it is to have a piece of sheet lead fitted to the collar-bones, and another against the chin and lower jaw, and to have screws between the two which will push in opposite directions. If you thus stretch the cicatrix you will get a good result; but if you merely pull up the cicatrix, the tissues about the shoulder give way, and the patient's last condition will not be much better than the first.

Leaving that part of the subject, I want to say a word or two as to why patients die after they are burnt. In the first place, they die from shock. In the old days of crinoline, which I am afraid is coming in again, cases were not very uncommon of girls, with ball dresses on, putting the candle down on the ground just to see that the last tuck was right, and then catching fire, and being in a mass of flames at once. Those patients generally died, the burns being so extensive all over the body that the poor girls died in a few hours after great suffering. But it is not absolutely necessary that a patient should die from her clothes catching fire. We had a case, you may remember, in the hospital two years ago of a servant girl who, turning round in front of the kitchen fire, set the back of her dress alight. When she came here she was frightfully burnt all over the back and the buttocks, but, fortunately, not in front, since a burn over the front of the body is much more serious than over the back. She had to lie on her face for many weeks, and we got the sloughs away, and the parts healed nicely. Fortunately, the cleft of the buttocks had not been affected, so that the rectum and the vagina were not interfered with, and the result was most satisfactory, the patient leaving perfectly well. But where patients do not die of shock, they are apt to die, as this child did, of an affection of the lungs. They either get bronchitis or some low form of pneumonia, and die from that, or they may get diarrhœa and pass a little blood, and then suddenly die; and at the necropsy you find that there has been a curious condition of ulcer of the duodenum, which the late Mr. Curling of the London Hospital called attention to as the result of burns.

I cannot tell you why it is the duodenum particularly that ulcerates; nobody seems to know. There are two or three theories about it, but I do not think that anybody really knows. There is no question, however, about the fact that ulceration of the duodenum is apt to take place, and then perforation or possibly hæmorrhage from the mesenteric artery, and the patient dies from that. It is important, then, not to set up diarrhœa in these cases—as important in the case of burn as in a case of typhoid. Nobody in his senses would think of giving purgative medicine in a case of typhoid for fear of diarrhœa and ulceration of the bowels; and it is the same in the case of burns. You want to feed the patients well, to give them easily-digested food, and if the bowels do not act you can treat them sufficiently by enemata acting on the large intestine, but letting the small intestines alone.

Then of course you may have deaths from other causes. Patients die occasionally with cerebral symptoms—from congestion of the brain, and so on.

Before I close I want to say a word on one form of scald—the so-called "scald of the glottis," though I would rather call it "scald of the larynx," because that is what it really is. It happens generally in this way. Poor children are left in a room by themselves for many hours, and, getting exceedingly thirsty, they want to drink something, and they go to the kettle, which is boiling on the fire, and they get a gulp of steam or hot water, instead of the cold water they wished for. The result is that a child gets a scalded mouth. But no further notice is taken until in the evening it is observed that the child begins to breath with great difficulty, and then possibly medical advice is sought. What happens is this: The scald affects the upper part of the air-passages, and after a few hours, not immediately, as the result of the application of hot steam, œdema comes on, and it is the œdema supervening a few hours afterwards which is so dangerous in these cases. In the museum of the College of Surgeons you will see a very good specimen of œdema of the larynx. It shows how all the ordinary sharp outlines of the larynx become obscured by the elevation of the mucous membrane due to the œdema beneath. The symptoms are unequivocal. The child is gasping for breath as in a case of croup, and you find that the mouth is scalded. The first thing to be done in such a case is to enclose the child in an atmosphere of warm steam, to erect a tent over the bed, and to bring from a bronchitis kettle steam underneath it. But if the case is severe that is not enough, you must at once proceed to scarify the throat. That is a simple operation, and an exceedingly useful one, and I believe if it were more frequently done early we should not have so many deaths from scalding of the larynx. You take a sharp-pointed bistoury and cover the heel of it with a strip of plaster. You then put your forefinger on the back of the bistoury so as to cover the point, and you slip your finger down the tongue until you come to the swollen epiglottis, which stands up and is three times its proper size. Then with the point of the instrument projecting beyond your finger you scarify pretty freely about the root of the tongue, the epiglottis, and the top of the larynx, where I do not think you could do any harm. People are afraid of undertaking this simple operation because they do not know exactly where the carotid artery is! If they do not, I am sorry for them; but certainly it is nowhere near the epiglottis, any more than it is near a tonsil which they may be going to remove. I never knew any hæmorrhage occur from puncture of œdema of the larynx, and you may incise and puncture it with the greatest relief to the patient. Then you give some hot milk-and-water to gargle the throat with; and a hot linseed poultice put under the jaw would give the patient considerable relief.

Still, the question may very likely arise as to giving relief by opening the windpipe. You cannot have a better test of the necessity for interference than what is called "retraction of the chest." You see the child taking a breath, and when it struggles in doing so, instead of the ribs rising, they fall in, very little air entering the larynx, and retraction of the chest wall taking place. Whether that is due to diphtheria or croup or a scald, it does not matter; it is a most important symptom, and if you see it you ought to open the windpipe at once. Where will you open the windpipe? Undoubtedly at the crico-thyroid membrane. There seems to be a prejudice in some surgeons' minds against doing laryngotomy in children. I cannot see why; it is a simple operation, for you can feel the cricoid cartilage distinctly enough to be a guide, and nothing can be simpler than to make an incision through the membrane and put a tube in. Larygotomy is quite sufficient, because, if you look at the anatomy of the parts, you will find that the œdema never goes below the true vocal cords—that was settled years ago,—and you are well below the vocal cords when you do laryngotomy. The reason why I urge the operation in this case of scald, as well as in the case of a foreign body, is that anybody can do it with a penknife. If a man has not done tracheotomy on the living body, it is very likely that, having heard about the dangers of the operation, he may possibly fight shy of it, but he cannot well do so with laryngotomy, because he cannot go wrong; and therefore I advise it in these cases.

Then as to drugs. If you have time you may try the effect of antimony, which I have more faith in than anything else. Give full doses of antimony according to the age of the patient, and be ready to do laryngotomy if required. Do not put it off too long. You will find that if laryngotomy is performed early in these cases you will not have to reproach yourself afterwards with having allowed the patient to die unrelieved.

THE Belgian Academy of Medicine has offered a prize of 500 fr. for an essay, "To indicate from deductions based on personal and original investigations a precise and easy method for estimating alkaloids in medicaments and pharmaceutical preparations." Memoirs must be sent in before Dec. 15th of this year, and may be written in either Latin, French, or Flemish.

ON SOME ARTERIAL MURMURS.

BY SIDNEY PHILLIPS, M.D. LOND., M.R.C.P.,
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(*Concluded from page 981.*)

II.—*Murmurs audible in Arteries within the Thorax.*

MURMURS in the aorta and in the pulmonary artery, where no valvular or aneurysmal disease is present, are generally admitted, and are met with most often in anæmia. But little attention is usually given to the effects of the respiratory movements upon them. The systolic murmur in the aorta in anæmia, however, is frequently only audible or much intensified during inspiration. In this it resembles the infra-clavicular murmur, and probably from the same reason—viz., that inspiration tends to dilate the vessel and diminish the tension of the blood within it. With regard to the murmur in the pulmonary artery, this is sometimes only to be heard in expiration, as has been pointed out by Dr. Russell,[1] who writes: "A common peculiarity of the murmur is that when the chest is elevated in inspiration the murmur disappears, reappearing during expiration." This I have frequently myself observed, but in other cases the murmur has only been audible during *inspiration*, and in some cases during both acts. These facts, however, seem to be explained by the consideration of the effects of the respiratory movements upon the arteries within the chest. There are certain influences which tend to bring out the murmurs, and certain others which tend to prevent it, in both expiration and inspiration, and the murmur will be audible or not audible at a particular time according as one or other of these influences predominate. As Dr. Michael Foster points out,[2] "the influences of the respiratory movements (on blood-pressure in the thorax) are not only many but conflicting, and the exact effect of any one movement will vary according as the circumstances rendering one factor predominant." The inspiratory action of the chest and lungs, as Dr. Sibson writes,[3] "dilates the air cells and expands the pulmonary vessels; while more air is drawn into the bronchial tubes and cells, more blood can be and is propelled into the pulmonary vessels.' *The pulmonic artery, then, unlike the systemic vessels, is most empty during expiration*, and this lowering of arterial pressure must tend to produce the murmur. On the other hand, though during inspiration the artery is comparatively full, there is a tendency to the production of the murmur from the dilatation of the arterial calibre which it brings about. The murmur, then, is sometimes heard during inspiration, sometimes during expiration, and sometimes during both acts, in anæmia. In inspiration the dilating influence on the artery may determine it, notwithstanding the counter influence of increased blood-supply; and in expiration the relatively empty state of the artery may produce it, notwithstanding that the dilating influence on the artery is not at work. The murmur in the pulmonary artery is much more common than in the aorta in anæmia; the reason of this has been much discussed, but it would appear that the relative infrequence of the aortic murmur may be due to the large quantity of elastic tissue contained in its wall, which keeps it adapted to the varying quantity of blood within it, apart from muscular tonicity, and to the thickness of its wall being much greater than that of the pulmonary artery, which renders it less easily acted upon by the inspiratory expansion of the thoracic cavity.

Murmurs in the Branches of the Aorta within the Thorax.—Besides the murmurs in the pulmonary artery and in the aorta in anæmia, murmurs may be sometimes heard in the upper intercostal spaces just to the right or to the left of the sternum or both, of systolic time, and apparently deeply situate in the chest, and which, from their situation, are altogether above the locality of the aorta or pulmonary artery. The character of these murmurs is quite distinct from those of the continuous venous murmurs sometimes audible in the same regions, and points to the murmurs being originated in the innominate, left common carotid, and left subclavian trunks within the chest, and this is confirmed in the case of the two former by their being at once arrested by pressure upon the carotid artery on the corresponding side of the neck. The following case will exemplify this condition.

Bruit in innominate artery and aorta during inspiration.—E. C——, aged thirty-one, came to my out-patient department at St. Mary's Hospital on Nov. 24th, 1887, with some uterine symptoms and marked anæmia. A soft systolic bruit was heard in the aorta immediately to the right of the sternum, but only on inspiration. A similar bruit was heard in the left subclavian artery, just below the clavicle, and also in the second intercostal space, one inch to the left of the sternum, which quite disappeared when the axillary artery was compressed, and was apparently produced in the part of the subclavian artery within the chest. On Dec. 8th the same bruits were heard, and also a similar rough bruit over the situation of the innominate artery. This bruit was heard whenever a deep breath was taken, occurring three distinct successive times with each inspiration and synchronously with the cardiac beats. There were no evidences of aneurysm or of cardiac or pulmonary disease, and the double synchronism of the murmur with inspiration and heart-beat was unlike an aneurysmal murmur. The patient attended for several months, and the murmurs somewhat decreased.

Hæmic murmurs in intra-thoracic arteries.—E. B——, aged fifteen, came as an out-patient to St. Mary's Hospital on Dec. 3rd, 1886, with well-marked extreme anæmia; the blood-corpuscles were 59 per cent. of the normal number. Pulse 104, very feeble. On both sides below the clavicle a loud bruit could be heard independently of respiration, and a similar bruit was also heard in the second and third spaces near the sternum. The patient again presented herself on Jan. 31st, 1889, with marked anæmia. There was then audible a loud murmur in the pulmonary area, and a murmur also in the first and second left spaces near the sternum, arrested by compression of the carotid in the neck, and apparently, from its position and this fact, produced in the left common carotid within the thorax.

I have notes of other similar cases where the murmurs heard could hardly have been produced elsewhere than in the large branches of the aorta. In consequence of the distance of the arteries from the parietes of the chest, they are usually not loud, but they may often be heard to be increased by inspiration or only to be brought about by that act. These arteries, being at a distance from the chest wall, cannot in any way be pressed upon by the rib or apex of the lung or the subclavius, and their existence is not only clinically important, but it affords further confirmation of what I have written respecting the production of the infra-clavicular and other functional murmurs.

III. *Murmurs in Arteries which are heard in connexion with Phthisis.*

In Phthisis two murmurs have been described, one in the region below the clavicle and one in the pulmonary artery. As regards the former, Dr. Stokes[4] says: "In tubercle of the lung, one of the most interesting signs connected with the vascular system is an increased action, often accompanied with a bruit de soufflet, which, when the upper lobe is diseased, may be occasionally heard in the corresponding subclavian artery, and which has not been described by any other writer." Since then the murmur has been very generally described as a sign of phthisis, though, as Dr. Walshe writes, "that, acquainted with the murmur for many years, I have constantly been on the watch for it, but rarely meet with it," it is certainly not one of the usual symptoms. It has always been assumed that this murmur was due to pressure. As the infra-clavicular murmur, apart from phthisis, was assumed to be due to pressure on the artery by some neighbouring anatomical structure, so here it has been assumed that the murmur can only be consistently accounted for by pathological pressure; and the pressure that has always been credited with the production of the murmur is that of the consolidated lung. But, in the first place, the murmur has been described in the very earliest stages of phthisis, where consolidation must have been of the slightest, and in later stages with large cavities where the consolidation has been almost destroyed. And surely a consolidated lung would not be apt to press upon the artery above it, but would be much more likely to be contracted, and to be unable fully to expand on inspiration, and therefore to leave the artery which should rest

[1] Some Morbid Cardiac Conditions, p. 66.
[2] Physiology, p. 371, fourth edition.
[3] Collected Works.
[4] Diseases of the Chest, p. 442.

upon it unsupported. The subclavian murmur, then, in association with phthisis, if produced by it at all, is the result of exactly the same mechanism as gives rise to it in anæmia and other states; that is, when inspiration is made, the consolidated lung fails to expand, and the artery in consequence is exposed in unusual degree to the dilating force of inspiration, and, becoming insufficiently applied to the blood within it, a murmur results as in other conditions. No doubt the anæmia which is present in most phthisical patients largely contributes to the production of the murmur, if it is not actually the cause of it—an opinion which seems the more probable because the murmur may be sometimes heard not only on the side where there is evidence of phthisis, but also on the other side of the same patient, where, so far as physical examination can ascertain, no consolidation exists.

Phthisis, with double subclavian murmur.—J. M——, aged twenty-eight, came as an out-patient to St. Mary's Hospital on March 21st, 1887, complaining of cough, pain between the shoulders, and hæmoptysis. The inner part of the left first and second intercostal spaces was almost dull on percussion, and the breathing over the upper space was bronchial, with crackles during inspiration. A very loud, rough, rasping murmur was audible just below the clavicle, increased on inspiration. On the right side a murmur was also to be heard, though much less loudly. He attended for a month, the signs remaining the same.

The murmur in the pulmonary artery was first described by Dr. Latham.[5] According to him, a murmur may be heard for one inch to the left of the sternum, between the upper border of the second and the lower border of the third rib, "systolic in time and unmistakable in its characters." He writes: "I have gained no knowledge of it by dissection, but have" witnessed it either in those "who were undeniably consumptive, or in those who were too justly suspected of being so." And he adds: "Where, from my direct examination of the lungs, I cannot get beyond a suspicion of tubercular disease, the murmur in the area indicated must always contribute to confirm it." Dr. Latham expresses his inability to account for it, and asks, "Supposing the pulmonary artery to be the seat of the murmur, does it become so in consequence of its own disease or by reason of pressure or impediment reaching it from the diseased lung?" Dr. Hughes[6] describes the murmur as heard in inspiration only, and refuses to regard it as characteristic of phthisis, though he believes it due to pressure. Dr. Walshe[7] writes: "The mechanism of this murmur requires further elucidation, but in all probability is essentially the same as that of the subclavian artery." And no doubt it is. In many cases it seems to be merely an anæmic murmur, occurring in a phthisical patient, best audible during inspiration, as is sometimes the case, and produced by the common conditions which produce anæmic murmurs. In other cases it appears to be actually due to the phthisis, not in consequence of the pressure of consolidated lung on the artery, but rather in consequence of its retraction leaving the artery unsupported. The following case exemplifies this condition.

Phthisis; murmur in pulmonary artery; death; necropsy. F. D——, aged twelve, was sent to Paddington-green Children's Hospital from the out-patient room on Feb. 15th, 1886. She had been an in-patient the year before for torticollis and left apical phthisis, and there were on her second admission evidences of consolidation and softening of the apex of the left lung as well as of the right. The dulness on the left side to percussion extended upwards to the second rib, and the expansion of the left side was very deficient. During the whole of her stay in the hospital a loud systolic murmur was audible to the left of the sternum as high as the second rib. She died of typhoid fever on March 28th. The post-mortem examination showed numerous typhoid ulcers, one of which in the ileum had perforated the intestine and caused death. The apex of the left lung was solidified, and the lung itself much retracted, there being extensive pleuro-pericardial adhesions. The pulmonary artery was found to be situate in exactly the position over which the murmur had been heard, and the lung, so far from pressing on it, was retracted to a considerable distance.

Both the subclavian and the pulmonary artery murmurs, then, in association with phthisis are probably the result of coincident anæmia, and, when due to the phthisis, are produced, not by pressure upon the vessels by the consolidated lung, but by the same mechanism which gives rise to the murmur in anæmia, the non-expansion of the lung leaving the vessel ill supported on its exterior. Neither murmur can be regarded as diagnostic of phthisis unless other signs of that disease are present.

[5] Diseases of the Heart, vol. i., p. 40.
[6] Guy's Hospital Reports. [7] Diseases of Lungs, p. 160.

IV. *Murmurs in Thoracic Vessels from Effusion of Fluid into Pleura.*

A murmur is sometimes produced in the large vessels of the thorax from the rapid effusion of fluid into the pleura. The following case affords an example of this. A male patient who had been ill in bed for a month with chest symptoms, who had been repeatedly examined by several physicians, and in whom it was certain that no murmurs existed, after pleuritic friction had been observed for some days, was found to have the signs of a large accumulation of fluid in the left pleural cavity. The effusion was very rapid, the dulness in a few hours rising to the level of the spine of the scapula. The apex of the heart was felt plainly in the right axilla, and there was evidence of considerable compression of the lung. Simultaneously a murmur of great intensity was developed; it was heard beneath the sternum opposite the second and third rib cartilages, and could be traced obliquely to the left behind that bone in the second and third left intercostal spaces. Supervening suddenly as it did, and coincidently with the rapid effusion into the pleura, it could hardly have been the result of anything but traction upon and stretching of one of the large vessels in the thorax, and from its position and direction appeared to be produced in the pulmonary artery. That this was so was borne out by the fact that after several aspirations of fluid the chest was eventually incised, and as the heart returned to its position the murmur entirely disappeared. I have not found any definite allusion in any of the works I have been able to consult of murmurs in the arteries produced in this way, but the recognition might be important, for in cases where the patient had by previous observation been known to be free from murmur such a bruit as that heard might be readily taken in conjunction with the other physical signs for evidence of aneurysm or intra-thoracic tumour.

The points to which I have drawn attention in this paper are of clinical importance. I have known of persons being refused for insurance on the ground of phthisis because they presented the subclavicular murmur, though they were afterwards insured, and have been in good health since the occurrence some years ago; and the murmur in the pulmonary artery in anæmia has led to the rejection of a candidate for one of the public services, though when it was afterwards shown to be due to anæmia the rejection was revoked. So, too, the murmurs in the larger branches of the aorta within the thorax in anæmia require careful diagnosis in the exclusion of aneurysm. And as regards the mechanism producing the murmurs in some arteries in anæmia and other conditions, I believe an investigation of the facts connected with them will show that they are all due to the same factors, their differences in rhythm and certain other conditions resulting from the effect of the respiratory movements and certain anatomical conditions.

Conclusions.—1. A murmur is sometimes audible in the subclavian artery immediately below the clavicle, which is not the result of organic disease or of pressure upon the artery, and is most common in anæmia and other conditions where there is defective adaptation of the arterial wall to the blood-current. 2. The various circumstances influencing the production and rhythm of the subclavian murmur are dependent on its anatomical position and the respiratory movements. 3. Murmurs may be often heard in anæmia in the large branches of the aorta within the chest. 4. The respiratory movements have a marked influence on the characters of anæmic murmurs in arteries arising within the thorax. 5. The murmurs heard in the subclavian and pulmonary regions in some cases of phthisis, inasmuch as they may exist without phthisis, must not be regarded as diagnostic of that disease, and are not produced by pressure of consolidated lung in most cases where they coexist with phthisis. 6. Murmurs may be originated in intra-thoracic arteries from traction upon them by the displacement of the heart in pleuritic effusion.

Note.—In the first part of my paper on Arterial Murmurs, in THE LANCET of May 18th, I quoted from Dr. Gee's "Auscultation and Percussion" a reference to the "subclavian murmur." My quotation was from an early edition of Dr. Gee's work; in a later edition, I have since learned, the paragraph in question has been much altered.—S. P.

UNIQUE CASE OF BILIARY FISTULA, WITH SOME OBSERVATIONS ON THE BILE OBTAINED FROM IT.

BY S. M. COPEMAN, M.A., M.B. CANTAB.,
DEMONSTRATOR OF PHYSIOLOGY AND OF MORBID HISTOLOGY AT ST. THOMAS'S HOSPITAL.

MARY ANN P——, a married woman, aged twenty-six, was admitted into Charity ward of St. Thomas's Hospital at the end of February, 1888, suffering from jaundice and severe attacks of pain in the region of the gall-bladder, accompanied by vomiting. She had had bilious attacks every few months for some years, but dated her present illness from her last confinement in August, 1887, shortly after which she first discovered a small hard lump, about the size of a walnut, in the right side, which varied in size at times, but gradually increased till the following December, when it was as large as a medium-sized orange. At first there was little pain or tenderness, but at the end of December she was seized with severe pain, coming on suddenly in the right side, shooting downwards over the abdomen and also upwards between the shoulders. The pain increased in severity, vomiting ensued, and several rigors came on, during one of which she lost consciousness for an hour, after which she was somewhat feverish. Two days later the skin became yellowish, and with an exacerbation of the pain she again became unconscious for nearly three hours. The motions, which were now pale, were examined for gall-stones, but without result. She was confined to bed for seven weeks, during which time she had two other attacks similar to the first, but of somewhat less severity. Other attacks ensued on Feb. 12th and 19th, 1888, and the jaundice gradually became more marked up to the date of her admission (Feb. 25th). The case was placed under the care of Dr. Bristowe, by whose kindness opportunity was afforded for making the observations to be recorded.

On the day after admission the patient had another attack of vomiting, followed by a rigor, during which the temperature went up to 103·5°. She was then deeply jaundiced, the skin being of a greenish-yellow colour. The heart and lungs were found to be normal, but the liver was enlarged, extending two inches below the ribs, and at its edge, in the nipple line, was a small rounded tumour, the size of a walnut, which was tender on pressure. The spleen could be felt below the ribs, enlarged and tender. The urine was of low specific gravity (1008), contained traces of albumen, and gave the reaction for bile salts. The bowels were relaxed, and the motions light-coloured. Search was again made for gall-stones, but unsuccessfully. Fever diet was ordered, with morphia at night to relieve pain, and leeches were applied to the region of the liver.

On March 2nd Dr. Bristowe notes: "Motions are quite white. There is less jaundice. Patient sleeps better and can take some solid food. Says she has wasted a good deal since Christmas."

Slight improvement continued till March 6th, when an attack similar in character to those previously described came on, the temperature running up to 104°. From admission until March 15th the stools invariably had contained no bile. On this date, however, she passed a motion of normal colour and firmer consistence than usual, which was examined for gall-stones, but again without result. It was also thought that she was less jaundiced. Next morning there was a return of pain, but no rigor; and the lump was found to have reappeared, and was very tender on pressure. In the belief that there was an impacted gall-stone obstructing the common duct, Dr. Bristowe consulted Mr. Sydney Jones in reference to the performance of an operation, and on March 24th the patient was temporarily transferred to the care of this gentleman, who cut down on the gall-bladder, which he then laid open, after stitching it to the abdominal wall. It was greatly distended, and about six ounces of a glairy, semi-transparent fluid, quite free from biliary colouring matter, were evacuated. No biliary calculus could be detected either in the bladder or in the common duct. The convex surface of the liver in the vicinity of the gall-bladder was seen to be studded with numerous white spots about the size of a pin's head, which Dr. Bristowe thought indicated commencing suppuration. On examining the fluid, it was found to contain cells resembling pus-corpuscles, and a few crenated red blood-corpuscles. When the wound was first dressed on the day following the operation, it was found that the dressings were stained with bile of a dark-green colour, which had oozed from the wound. At each subsequent dressing the quantity of bile was found to be greater; and at length the amount became so large that the sheets were saturated with the secretion, which had escaped through the bandages. This being so, it was determined to collect the bile for examination, and accordingly on May 17th a glass cannula was fitted into the fistulous opening, and the bile was thus conducted into a receptacle in the manner to be presently described. Meanwhile the patient had been entirely free from pain since the operation, and the temperature had never risen appreciably above normal. She took food with satisfaction, and for the most part slept well, although occasionally somewhat restless at night. She evidently gained in weight, and the yellow colour gradually disappeared from the conjunctivæ and skin. A day or two after the operation a fairly normally-coloured motion was passed, but with this exception the fæces remained clay-coloured. The urine for some time continued to be darkly stained with bile, but after the first week in May none could be detected, Gmellin's and Pettenkofer's tests both giving negative results.

The improvement in the patient continued to be most marked, one proof of which is seen in the fact that she gained four pounds in weight in a single week, while the clinical clerk noted that on June 22nd Dr. Bristowe told her that she was getting quite rosy. A fortnight later she complained of some pain in the left side, which did not, however, appear to be very severe. In the evening her temperature appeared to be 106·8°, but, suspicion being excited, the sister took it again, when it was normal. It appeared that the patient was getting somewhat tired of her stay in the hospital, and so tried to excite interest by manipulating the thermometer in a manner learned from the occupant of an adjoining bed. On July 3rd Mr. Battle tried to pass a probe along the common duct, but failed to do so. For the next week the patient remained free from pain, had a good appetite, and slept well, but on July 10th she had a rigor at 7 P.M., accompanied by pain in the head, while at midnight the temperature had risen to 104°, when ten grains of sulphate of quinine were administered. On the afternoon of this day, about 3 P.M., Mr. Sydney Jones had also failed in an attempt to open up the common duct by means of a probe, the operation appearing to cause considerable pain. Next morning, however, she appeared better, and the temperature had fallen to 97·4°, but there was still some headache. She was weighed in the course of the day, when she scaled 7 st. 2 lb. In the evening hæmorrhage commenced from the wound, for which ice was applied and afterwards pressure, but the bleeding could not be entirely controlled, so that on the morning of the 12th the fistulous opening was plugged around a drainage tube, and a hypodermic injection of morphia was given.

Dr. Bristowe notes on July 10th: "Has been very ill for the last few days. Complains to-day of severe headache and lies in a drowsy, apathetic state. Patient lost a good deal of blood from the 11th to the 13th, during which time she has passed scarcely any bile. Now the hæmorrhage has ceased, and the flow of bile is more marked. She is much jaundiced, very thirsty, and has been sick to-day."

On July 16th the jaundice was increased, diplopia was present, and the temperature at 8 A.M. was 102·4°; the pulse rate was 116. Two days later the patient was much worse. The lips were very pale, the pulse slow and almost imperceptible, and delirium supervened, although she was conscious at intervals. She appeared from her cries to be in great pain, and consequently three injections of morphia were given during the twenty-four hours. From this time, remaining entirely unconscious, she became gradually feebler, and died at 4.40 A.M. on the morning of July 19th, her temperature, which for the previous week had never been down to normal, being 103·6° when taken half an hour before her death.

A post-mortem examination was performed the same day, the results of which were as follows:—The body was somewhat thin, and deeply jaundiced. About an inch below the right costal margin was the orifice, a vertical slit half an inch in length, of a canal leading upwards and backwards for three inches and a half. This canal, which represented

the gall-bladder, was found to have a uniform calibre of less than half an inch, not quite admitting the forefinger. The pleuræ, pericardium, heart, and lungs appeared quite normal. The spleen was large, soft, and darkly congested, but the surface was uniform. There was nothing abnormal in the abdominal cavity; no fluid, or any sign of past or present inflammation, with the exception of firm adhesions round the fistulous opening. No enlarged glands were found in the thorax or abdomen, and no thickening or hardness could be felt about the portal fissure or in the course of the common duct. The liver appeared normal, and on section showed nothing beyond somewhat considerable dilatation of the bile-ducts, especially in the left lobe. On the surface of the kidneys there was a marked contrast between the stellate veins and the bile-stained tissue of the organ, which was otherwise healthy. The mucous membrane of the bladder was deeply stained with bile. The uterus was large, and there were two or three small cysts in the ovaries. The brain appeared healthy, but on the lateral surface of the right frontal lobe were two small blood-clots about the size and shape of a three-penny piece, lying between the pia mater and arachnoid, which stripped off with the membranes, when the subjacent cerebral substance showed nothing abnormal. There was no inflammation of the membranes, and no excess of fluid in the ventricles. The patient fell out of bed a week before her death, which may possibly account for the presence of the clots. A portion of the liver, including the atrophied gall-bladder with the cystic and common ducts, was handed over to Mr. Shattock for more careful dissection and preservation as a museum specimen. On examination, he found that the liver, except that its substance was stained with bile, and that the main bile-ducts were somewhat dilated, was perfectly normal, and that there was no stricture or new growth of any kind along the course of either cystic or common duct. Quite at the extremity of the common duct, just at its junction with the intestine, a calculus was found firmly impacted, which measured 1·3 c. in its greatest transverse, and 1·6 c. in its greatest longitudinal diameter. With the exception of the blocking at this point, the ducts were quite patent throughout their course, and communicated freely with the gall-bladder. The common duct was somewhat dilated at its point of union with the cystic duct, where, on its being laid open, the internal circumference measured 3·3 c. From the size of the calculus it seemed quite impossible that anything short of a surgical operation could ever have dislodged it from the position in which it was found.

(To be concluded.)

POST-MORTEM SWEATING.

BY JOHN A. CONES, M.R.C.S., L.R.C.P., &c.,
RESIDENT MEDICAL OFFICER, ST. GEORGE'S RETREAT.

THE following marked case of post-mortem sweating is unique, as far as I can ascertain, in the records of medical science; this and its importance to the medical jurist has induced me to bring it before the notice of the profession. I have failed to find in the literature that I have been able to examine any instance of a similar observation, and I am therefore induced to give the leading features of the case, both ante- and post-mortem, in some detail.

The patient, a male aged forty-two, had for over nine months been suffering from albuminuria. The albumen never exceeded one-fourth. Microscopical examination of the urine showed no casts, but abundant urates; there was no dropsy or ascites. Ten days before death he was suddenly seized with uræmic coma and left hemiplegia, which last persisted unchanged to the end. The temperature was normal until the last few days, when it was considerably higher, ranging from 102° to 104°, and so persisting to within six hours of death, when it steadily sank. All treatment to produce diaphoresis gave very slight and unsatisfactory results; and the skin, though not absolutely dry, was destitute of sweat to any extent during the earlier days of his fatal attack. Hypodermic injections of pilocarpine were given on four occasions, the dose being gradually increased; the last injection (one-third of a grain) was given three days before death; this produced a fair amount of sweating for about twenty minutes, but was not repeated on account of the excessive bronchial secretion it on this occasion gave rise to. Forty-eight hours, however, before death the patient began to perspire profusely, and this continued without any interruption to the very end, even when the surface temperature was decidedly subnormal. The body, as usual, was washed and laid out on the bed, and four hours afterwards was removed thence to a bier, nothing unusual being noticed at the time of removal or before. When, however, the body was seen next morning—sixteen hours after death—it was at once noticed that the sheets and pillows on which it lay were absolutely saturated with sweat, and the skin felt moist and clammy; this continued for at least eight hours, but thirty hours afterwards it had apparently ceased and the sheets &c. were then drying. It was also noticed that post-mortem discolouration was well marked even when the body was first seen.

The points I would like to draw special attention to in the above case are: the considerable time that must have elapsed after death before the secretion was poured out, at all events in any quantity; and the great amount of the same. I regret, however, that not even an approximate estimate of the actual amount could be made. It must, however, have been considerable, as was evident from the condition of the linen. Dr. Carpenter,[1] though he does not give any instances, says that post-mortem secretions are known to take place, and goes on to explain their occurrence by the assertion that capillary circulation may be maintained for a short time after "somatic" death has taken place. The only instances in which this form of circulation seems to have been observed in the adult are in those given by Dr. Bennet Dowler in the *New Orleans Medical and Surgical Journal* (January, 1849). These are mostly cases of rapid death from severe acute disease, and the capillary circulation is said to have continued in them for a few minutes after death, but never for any lengthened period. Dr. Carpenter[2] seems also to have held the opinion that post-mortem secretions may, under certain circumstances, take place, the material for such secretions being supplied by the blood in the vessels at the time of death, the gland cells themselves continuing their molecular life for some time after the suspension of the general circulation. No instance of such an occurrence in man seems to have been recorded, but the following instance in that of a rattlesnake is quoted by the author in support of the theory. Mr. T. Bell[3] says that, being engaged in the careful dissection of the poison-apparatus of a rattlesnake, the animal having been dead for some hours and the head taken off immediately after death, he found that the poison continued to be secreted as the dissection proceeded, and in such quantities as to require being occasionally removed with a sponge.

Neither of the above theories seem fully to explain the case I now record; for when we consider the interval that elapsed after death before the secretion was poured out, we should be compelled either, on the one hand, unwarrantably to extend the period during which post-mortem capillary circulation may be continued, or, on the other, to suppose that molecular cell life persists much longer than is generally admitted, after all systemic vital functions have ceased. The explanation, however, which suggests itself to my mind, and which I venture to give here, is this. The patient was sweating freely up to the time of his death, and we may therefore suppose that the glands and lymph spaces surrounding them were fully charged with fluid at the time. If so, then, when the rigor mortis began, the contents of these glands and lymph spaces may have been mechanically pressed and filtered out. For Dr. Brunton, in a valuable paper on the Pathology of Dropsy,[4] tells us that the beautiful experiments of Claude Bernard on the influence of irritation of the chorda tympani on the secretion of the submaxillary gland shows that the secreting cells do not derive the materials for their secretion directly from the blood, but indirectly through the lymph spaces which surround the alveoli. These spaces form, as it were, reservoirs—so much so, indeed, that if care be taken to fill them during the experiments, the gland will continue to secrete even after the head is removed from the body. It might be objected that the quantity was too great to be so accounted for; but this, I think, is fairly met by remarking that the

[1] Principles of Human Physiology (early edition), p. 243.
[2] Op. cit. (edited by Mr. H. Power), p. 1029.
[3] History of British Reptiles, p. 61.
[4] The Practitioner, vol. xxxi., p. 189

number of sweat glands and their corresponding lymph spaces distributed over the body is very great,[5] and a little fluid from each would therefore amount to a considerable quantity.

Now to reflect for a moment on another possible explanation of the above phenomenon. If we consider the somewhat analogous instances of post-mortem rise of temperature, I think it will be admitted that, to explain their occurrence by the assertion that they are due to the stoppage of the circulation through the lungs, and to the consequent cessation of one of the sources of loss of heat, does not account for an absolute rise of temperature after death; much less does it offer an explanation for those cases in which the rise has taken place, to the extent of even 4°, after an initial fall of temperature.[6] With our present knowledge of the influence of the nervous system on the production and regulation of the body-heat, would it be unphysiological to suppose that these cases of post-mortem rise of temperature are due to the production of an autogenetic stimulus in the cadaver, which excites the thermogenic centre into action? This, I think, might be granted, if we admit, with Dr. Carpenter, that molecular cell life may continue after "somatic" death has taken place. Again, if we accept this theory of Dr. Carpenter, it follows that cells or groups of cells die at longer or shorter intervals after the vital functions have ceased, and the higher they stand in the scale of development the earlier they are likely to die under the circumstances. The highest centre regulating the thermic functions is the thermotaxic or inhibitory; and if this function be destroyed before the lower, which it controls, then the thermogenic and thermolytic centres will come into action, producing a rise of temperature. In the same manner, might not post-mortem sweating also be explained on similar grounds? M. Strans, in an exhaustive monograph on the Mechanism of Sweating,[7] tells us that the conclusion arrived at after experiments on animals by A. Kendall and Luchsinger is that the secretion of sweat is entirely under the influence of the nervous system, and independent of modifications in the circulation. They succeeded in inducing profuse sweating in the limbs of animals, previously rendered exsanguine, by stimulation of the main nerve-trunk, and in recently amputated limbs; and also on stimulation of the medulla oblongata after ligature of the aorta. M. Vulpian likewise found that abundant sweating may be induced by faradaic stimulation of the nerves of a limb, the sweating being coincident with a marked diminution in the size of the vessels of the part. Experiments of hypodermic injections of pilocarpine, on the recently dead subject, and on limbs immediately after amputation, always gave negative results. The further elucidation of this question I must, however, leave to those better qualified to deal with the subject.

As regards the medico-legal bearings of this case, it will readily be imagined that a dispute as to the time of death might arise. In the present instance the appearances presented by the body were those of very recent death, which might plausibly have been asserted to have taken place much later than it actually did but for the post-mortem discolouration. It also shows that sweating is no proof that a person is apparently, not really, dead—a point of some interest both to the medical jurist and the general practitioner who might be called on to verify a doubtful case.

I have said that I believe the above case is unique in the annals of medicine. I do not of course imagine that post-mortem sweating has never occurred before, but that it has not been noticed and recorded, and I now desire to call attention to it in the hope that those who have greater opportunities than myself may look for this interesting phenomenon, and record their observations.

Burgess Hill, Sussex.

[5] According to a calculation made by Sir Erasmus Wilson, there are, in a person of ordinary stature, about seven millions of sweat glands, with an aggregate length of perspiratory tubing of about twenty-eight miles.

[6] Principles and Practice of Medical Jurisprudence, by Dr. Taylor, p. 9. Legal Medicine, by Dr. Tidy, part i., p. 47.

[7] Des récents Travaux sur la Physiologie de l'Appareil Sudoral. Par J. Straus. (Revue des Sciences Médicales, Juillet, 1880.)

CANE-HILL ASYLUM.—The London County Council have agreed to enlarge this asylum, so as to provide accommodation for 2000 patients. It was constructed to hold 1124 patients. The probable cost of the work is estimated at £130,000, and it will take two years to carry it out.

PUNCTURE OF RIGHT LUNG BY A KNITTING-NEEDLE;

PNEUMOTHORAX; EMPHYSEMA; DEATH; REMARKS.

BY F. H. WIGMORE, M.B. CANTAB.

AT about 9.30 on the night of Feb. 25th, I. O'G——, an actress, aged thirty-three, was seated knitting in front of a dressing-table. In moving forward to allow someone to pass behind her, one end of the knitting-needle came in contact with the hard edge of the table, while the other was thrust into the chest an unknown distance. Immediately a sharp pain shot upwards along the right side of the face and neck, and downwards as far as the right elbow. She felt rather faint. The needle was withdrawn; a few drops of blood escaped, but she thought nothing of it, and went on the stage and played during two more acts, in one of which she sustained the principal part. She was taken home, and went to bed. At 3 A.M. the pain was severe, the breathing difficult, and the right breast swollen. Soon after this I saw her. The knitting-needle had pierced the third right intercostal space in the mid-clavicular line, and taken an upward direction. On placing the hand on the seat of injury, the crackling sense of surgical emphysema was conveyed to the palm, and extended downwards to about the inferior margin of the breast, the cutaneous tissues of which were much swollen. The right chest was hyper-resonant. The heart was beating with its apex in its natural situation. Respiration 40; pulse 100. Auscultation presented all the signs of pneumothorax and pulmonary collapse. The breath sounds on the left side were harsher than those which would be produced by mere exaggeration, and on inquiry she said she had had a chronic cough for years. Her face was dusky and wore a most anxious expression. Rest, stimulants, and ether were enjoined. At 9 A.M. the emphysema was more diffused, and extended to the left chest and up the right side of the neck. Respiration 56; heart's apex beating in left mid-axillary line; pulse 120. At 4 P.M. the condition was the same, but the pulse was almost running. I aspirated as for pleural effusion, and drew off the air. At the very moment the aspirating needle pierced the chest and the stopcock was turned, relief was experienced, the respiration falling from 56 to 28, and the pulse dropping to 80. At 4.30 P.M. the right pleural cavity had filled again with air, and the respirations were 40; but on the whole she was easier, and had no pain. At 8 P.M. the emphysema had extended; the neck and face were swollen and dusky; the eyeballs were prominent; the bubbly crackling could be felt over the abdomen, chest and back; the hands were cold, the pulse very frequent, and respiration 52. The respiratory murmur on the left side was obscured by the emphysema, but conveyed the impression of congestion. The right lung was collapsed. Aspiration was again performed at the same spot as previously. A little red blood sputtered into the receptacle, and, in spite of the needle's direction being changed in various axes, no air was withdrawn. The patient declined to be aspirated again, and the case—not an encouraging one at the first—became hopeless, and she died after one short interval of increased vitality and diminished symptoms, twenty-eight hours afterwards, with respiration at 60, and pulse at wrist imperceptible a short time before death. No post-mortem could be obtained.

Remarks.—This is one of those distressing cases in which causes, slight in themselves, produce unexpected and widespread results. I have seen pneumothorax and emphysema again and again result from serious injury to the chest, either by stabbing or crushing, and can only recall at this moment one death, and in that the emphysema extended over the whole body, which was enormously swollen. We puncture the lung often enough with an exploring needle without producing any evil consequences, and so safe is this practice considered that many surgeons use the exploring needle in a first examination, to clear up with exactitude the diagnosis of a pleurisy, an empyema, and a pneumonia. What were the factors which determined death in this case? For four days she had kept nothing upon her stomach; for some weeks previously she had been much troubled mentally; for years she had suffered from a chronic cough. No one will suppose that the injury of itself could produce such a train of symptoms as that presented, and it is doubtful if death would have ensued,

even in her debilitated condition, had she not gone through the exertion of her part in those two last acts, little dreaming that the curtain was about to fall upon her own life. The pneumothorax could not have been considerable for at least four hours after the needle penetrated the lung, and had she remained at absolute rest on the receipt of the wound I do not think any backward escape of air would have taken place. Sad as the case is, there is nevertheless encouragement to be found in it, for the relief experienced by aspiration, though temporary, leads one to hope that early, and, if need be, frequent, aspiration is a form of treatment which in the worst cases of this kind will lead to a successful issue.

Macclesfield.

"AN UNNAMED FEVER."

By J. TOPPIN, L.R.C.S.I., L.K.Q.C.P.I., L.M.

MANY of the readers of THE LANCET have probably seen the paragraphs which have appeared in the press about the fever epidemic in Rio de Janeiro and other Brazilian ports. I do not wish to enter here into the question of the truth of the statements regarding it. There can be very little doubt that the Brazilian authorities wish to make it appear less formidable than it really is. But I am anxious to bring before the notice of the profession a fever which I believe has not yet been properly named, although such terms as "accesso pernicioso," "febre amarilla fulminante," "pernicious fever," and "malignant yellow fever" are used to designate it in Brazil, and which in its malignancy outrivals any fever that I have ever seen or heard of. The first case I saw was at the commencement of the epidemic, in the month of January, when the weather was unusually hot in Rio, on this particular day the thermometer registering 100° F. in the shade. At the time, I diagnosed the case as one of heat apoplexy; and, indeed, it is said that many of the cases where death took place very suddenly, and which were put down to "accesso pernicioso," were really heat apoplexy. However, I now give it as an example of one of the many cases for which the very meaningless name of "accesso pernicioso" has been invented by the Brazilian authorities.

E. A. B——, a passenger from England to Buenos Ayres, went ashore in Rio, and in about half an hour was brought back in a comatose condition, with a temperature of 110° F., and died within an hour. Before going ashore he had been in good health, but soon after landing complained of pain about the epigastrium, and in a few minutes became delirious and then comatose. He had been in the tropics before, in India, and other climates, even hotter than the Brazils, and was more inclined to be anæmic than plethoric. I applied ice to his head, sponged him with iced water, administered enemata of sulphate of magnesia and water, applied sinapisms to the spine and to the calves of the legs, and subcutaneously injected antipyrin and quinine; but all to no purpose, there being no variation in the temperature, which remained high for some little time after the man was dead.

The next case I am able to give somewhat more fully, as I watched it from the beginning.

W. H——, aged forty-one, a first-class passenger from Monte Video to England, came to me on the night of April 7th for something to open his bowels. I gave him two podophyllin pills, followed next morning (April 8th) by a dose of seidlitz powder; this had no effect. It turned out that his bowels had not been opened for several days, but otherwise he was what would be called a fairly healthy man. He had been dancing and playing cricket on deck only the day before, and had taken the precaution of not going ashore. Finding that the pills had had no effect, I gave him two glycerine suppositories of thirty minims each, and later on two ounces of castor oil per rectum. As none of these had moved his bowels, and as he had in the evening a temperature of 102°, I gave him a mixture containing one minim of croton oil and five minims of oil of peppermint; this moved the bowels three times. At 3 A.M. on the following morning (April 9th) I was sent for to see him. He had then a temperature of 105°; the skin was very hot and dry, and the pulse 120, full and strong. The only thing he complained of was great weakness of the legs. He had no headache or pain anywhere, and could keep his legs stretched out with as great ease as in any other position. He had no lenticular rose spots, gurgling or wincing on pressure over the right iliac region, or other sign of gastric fever. I mention this because fever was said to be prevalent at Monte Video, where he lived. His kidneys were not acting very well, and the urine, when examined, was found to be albuminous. I gave him antipyrin (Dr. Knorr's) in twenty-grain doses, increased to thirty-grains, at intervals of something less than an hour for four hours, without any perceptible effect on the state of the patient or diminution of the temperature. Until a few hours before death the patient's mind was clear, although there was a tendency to delirium. I gave him twenty grains of quinine, followed by a mixture containing nitrous spirit of ether and nitrate of potash, without in any way lessening the temperature; cold sponging of the surface of the body was also tried. Dr. Fairbairn of Rio was called in for consultation, and he pronounced the case to be one of yellow fever. At about 1 P.M. fatal symptoms exhibited themselves—black vomit, hiccough, and subsultus tendinum. He had been covered with prickly heat; this now disappeared, and his skin became, if anything, paler than usual, but there was no jaundice whatever. He soon became comatose, and died at 3 P.M., the body quickly turning a bluish black in mottled patches.

I would like to remark that the disease appears to be, like yellow fever, non-contagious; for the wife of the patient, who was quite overcome with grief, was in the cabin the whole time, and wiped his mouth with her own handkerchief; two or three other people were also in and out of the room. Whether it could be caused by the same morbid influence as yellow fever, acting on peculiar constitutions, is a question I leave to those who are better able to decide it; but the fearful rapidity and fatality of the disease, the absence of pain and jaundice, combined with the fact that the mortality from the ordinary cases of yellow fever during the epidemic has been much below the average, would, I think, point to its individuality. The blood seems to be so completely and rapidly disorganised that treatment is of little avail.

H.M.S. "La Plata," Lisbon.

NOTES OF A

CASE OF TRAUMATIC EFFUSION INTO THE PERITONEAL CAVITY; RECOVERY.[1]

By EUSTACE G. CARTER, M.R.C.S.

ON May 18th, 1888, I was called to W. S——, a boy aged ten years, who, whilst playing on the brink of a disused quarry, lost his footing and fell from a height of forty feet, alighting at the bottom with his abdomen across a projecting boulder. He managed somehow or other to scramble out at the opposite side of the quarry, which was less precipitous, and to walk home—a distance of a quarter of a mile. When I saw him he was suffering a good deal from shock, but was sensible and remembered all about the accident. There was a lacerated wound extending obliquely across the forehead for three inches, the bone being laid bare beneath. There was also a green-stick fracture of both bones of the left forearm, about the junction of the middle with the lower third. The abdomen presented a normal appearance, save for a small abrasion about the size of a shilling, situated one inch below the costal arch, and two inches to the right of the middle line. On palpation there was some tenderness in the right hypochondriac region; no increase of hepatic dulness, or absence of the same, on percussion. There were no other injuries.

The subsequent history of the case is as follows. For the first forty-eight hours there were few abdominal symptoms, save vomiting and pain in the hepatic region, the motions and urine being both free from blood. On the third day, the pain in the hepatic region was more severe, and eventually became general over the whole of the abdomen, which became distended and tympanitic, the patient now presenting all the classical symptoms of acute peritonitis. About this time icterus set in, the conjunctivæ being deeply bile-stained, the urine bilious, and the motions light-coloured and clayey. Three days subsequently (that is, a week after the accident), dulness on percussion in the flanks developed, which rapidly extended, taking the place of the tympanites, so that at

[1] Read before the Leeds and West Riding Medico-Chirurgical Society.

the end of a week the abdomen was dull on percussion from the pubes to above the umbilicus, and on palpation a fluid wave could be easily propagated across the abdomen. On June 3rd, a fortnight after the accident, I tapped the abdomen by means of a Southey's trocar, my reason for using such a small instrument being that the patient was extremely weak and very nervous, the introduction of even this small instrument causing considerable mental disturbance. I withdrew six pints of dark-green viscid fluid, of a specific gravity of 1020, which coagulated with heat and nitric acid. Pettenkofer's test produced the characteristic reaction for the biliary acids. Microscopically, a few blood-cells were found, but nothing else of any moment. The boy was much relieved by the paracentesis, but the body soon began to fill again, so that by the end of a week I had to repeat the operation, withdrawing to within an ounce or two of six pints of fluid, exactly similar in character to that I have already described. At the end of the following week I tapped again, removing five pints of fluid. The abdomen was thus tapped three times. A little fluid again accumulated, but was gradually reabsorbed, and no further tapping was necessary. In the meanwhile the patient began to improve, the urine by degrees assuming its normal appearance, bile again appearing in the fæces, and the icterus gradually disappearing from the skin and conjunctivæ. The wound in the forehead healed by granulation without any exfoliation of bone. The fractured forearm, which had been put up in the usual manner, united kindly, and by Aug. 3rd (ten weeks after the accident) the patient was able to go to the seaside. The boy is now perfectly well and strong, and, save for the scar on his forehead, shows no traces of the accident. Symptoms were treated as they arose, opium in small doses being the principal drug administered. Benger's peptonised milk gruel was simply invaluable in this case, the patient vomiting every form of liquid nourishment, even milk freely diluted with lime-water.

Remarks.—The exact lesion which caused the abdominal symptoms in this case is obscure; however, one of three causes, it may be presumed, brought them about—viz., (1) rupture of liver, (2) ruptured gall-bladder, and (3) rupture of a cyst in connexion with the liver. To each of these premisses some objection can be urged. 1. The apparent absence of extravasated blood in any quantity within the peritoneal cavity seems to negative the probability of there being any rupture of the liver substance. 2. The comparatively rapid recovery of the patient militates against the theory of ruptured gall-bladder, for it is scarcely likely that a large rent (?) in that viscus would close completely within ten weeks after the accident, without at least for some time longer leaving a fistulous opening and causing further accumulation of fluid within the peritoneal cavity. 3. The rupture of a cyst in connexion with the liver would point strongly to its being hydatid in nature, but the fluid withdrawn presented none of the characteristics usually assigned to hydatid fluid, though as regards the physical characters of the fluid the accompanying inflammatory symptoms would no doubt account in some measure for its alteration in appearance and chemical reaction, but not for the presence of bile, nor yet for the absence of hooklets when examined by the microscope.

Chapel Allerton.

Clinical Notes:

MEDICAL, SURGICAL, OBSTETRICAL, AND THERAPEUTICAL.

PILOCARPINE IN THREATENING MANIA.

BY E. F. WILLOUGHBY, M.B. LOND.

THERE are few drugs of which the physiological action is so direct and palpable, but of which the therapeutic uses are so undetermined, as pilocarpine. It has been given in a great variety of conditions and diseases, without having as yet taken a recognised position such as that held by aconite, for example, or salicylic acid, digitalis, atropine, and others, which are employed not empirically, but with a definite apprehension of their physiological action. A note, therefore, of a case in which I employed it, with immediate effects surpassing my expectations, may interest the readers of THE LANCET.

A gentleman of powerful build and abstemious habits, a highly intellectual man, and largely engaged in mining speculations, perfecting inventions, &c., had been for a long time working at high pressure, so to say, until at last he fairly broke down. Naturally a sound sleeper, he had for several weeks been almost unable to sleep, and during short dozes he talked of business. His appetite had failed, and for the three or four days before I saw him, though he had gone as usual to his office, he had scarcely slept or eaten. I found him in bed in a darkened room, with wet cloths on his head, singing, shouting, gesticulating, snapping his fingers, talking wildly, and seeing illusions. His temperature was at least 104°F. (I could not keep the thermometer anywhere for more than a minute on account of his restlessness), his skin (as it had been, I was told, for several days) dry and burning, and his throat and mouth parched, with viscid mucus, which he tried vainly to hawk up. I may add that he had not resorted to alcohol, being almost an abstainer. My first thought was to obtain sleep as the only means of averting mania, and I gave him twenty-five grains of chloral hydrate, fifteen minims of liq. opii. sed., and a glass of milk. Six hours later I saw him again; he had not closed his eyes, and was talking incessantly and more incoherently than before. I then determined to try pilocarpine, and injected one-sixth of a grain in the arm at 10 P.M. Not more than five minutes had elapsed before profuse perspiration and salivation commenced. Next morning, at 10 A.M., I found him perfectly calm and rational, his skin cool and moist, temperature in the mouth 99°, his head clear, and appetite returning. He had had seven or eight hours of refreshing sleep, and gave a most graphic description of the flow of perspiration and saliva, which had been, he said, such as he could not have believed had he been told it by anyone else. He felt well, though weak, but not more so than he was before the crisis.

Green-lanes, N.

NOTE ON A SPECIMEN OF HAMMER-TOE.

BY WILLIAM F. HASLAM, F.R.C.S.,
ASSISTANT SURGEON TO THE GENERAL HOSPITAL, BIRMINGHAM.

THOUGH there is considerable doubt as to the exact cause of the condition known as hammer-toe, there is a very general agreement as to the changes that are found on dissecting a well-marked specimen of this condition. How far these changes are instrumental in producing the deformity, or whether they only result from it, is an open question. The following case illustrates very well what is found in a typical case. The toe had been removed from a woman aged twenty-eight. The second phalanx was flexed on the first, the third being in a line with the second. With moderate force this flexion could be completely overcome and the joint extended, complete extension being accompanied with distinct click or "trigger" action. Over the joint there was considerable cutaneous thickening, in which was a cavity opening on the surface by a small hole. The flexor and extensor tendons were normal. The lateral ligaments were thickened, and resisted extension; divison of one of these permitted extension. At the junction of the lower and middle third of the head of the first phalanx there was a transverse depression, the cartilage being thin and almost worn away, which was apparently caused by this part of the head resting on the lower ridge of the base of the second phalanx. At the upper part of the head the cartilage was altered in colour and thin, the prolonged flexion removing this part from contact with the base of the second. On the lower ridge of the base of the second phalanx at the point of contact with the head of the first the cartilage was completely worn away and the bone exposed. Even in the treatment of hammer-toe there is diversity of opinion, some advocating excision of the joint, some subcutaneous division of the lateral ligaments, while others prefer amputation. From an examination of this specimen, it seemed probable that the method of subcutaneous division of ligaments, as practised by Mr. Adams and others, would have relieved the deformity. Mr. Adams thinks this may be done without opening the joint, but from a careful inspection of these ligaments one sees that there is hardly room to efficiently divide them unless the joint is opened, as their attachments at either end are so close to the line of articulation. Fortunately, however, with care, a puncture of the joint is not attended with any risk.

Birmingham.

CASE OF SALIVARY CALCULUS; REMOVAL.

By WM. H. BROWNE, L.R.C.P. EDIN., &c.

IT is not often that operative interference is required for the removal of salivary calculus in a patient so young as the one in question; the following notes may, therefore, be of some interest to the readers of THE LANCET.

T. V——, aged eight, a strong, healthy-looking lad, was brought to me by his mother for examination, as he complained of "a lump inside his cheek," with constant discharge of saliva, more or less during the day-time, though causing him little trouble during the night. On examination, I found a hard substance, the size of a small bean, blocking up Wharton's duct, with an anterior fistulous opening, through which the sharp end of the calculus projected. Large as the orifice was, I found it impossible to remove it through the opening, so decided to slit up the duct. Some little difficulty was experienced in keeping the tongue out of the way, but the mother, "a strong-minded individual," gave valuable assistance by depressing and keeping the tongue on one side. A free incision over the tumour soon set the calculus at liberty; it weighs a little over seven grains, and may be considered large for so young a patient.

That these calculi are rare no one disputes, but to me it appears strange that I should be able to record three cases in eighteen years, two of which were people in advanced life, the calculi in each case being small in size and easily broken up, the calcium base evidently being associated with some fatty matter. The calculus in the other case is apparently free from any organic contamination, at least so far as one can detect without chemical analysis; it is hard in texture and in the same condition as when it was first removed some time since. From what I can glean, salivary calculi, rare as they may be, are more common in adult and advanced life, and are rarely met with in children, so that we may consider the age of the patient the most interesting part of the case. It is, perhaps, needless to say that the little fellow soon recovered from his operation, and the fistulous opening rapidly closed with that of the incision.

Aldbrough, Hull.

THE ETHER SPRAY IN STRANGULATED HERNIA.

By WALTER E. LLOYD, L.R.C.P. EDIN., &c.

I AM able to record another successful reduction of strangulated femoral hernia by the aid of the ether spray.

On Saturday, May 4th, I was called at 10.30 A.M. to Mrs. R——, aged forty-seven. I found a hard swelling about the size of an orange in the right groin. No impulse was caused by coughing. There was constant vomiting, which had not, however, become stercoraceous. During December last I attended this patient for a similar condition, and I was then able to reduce the hernia by taxis. On the present occasion I found this to be impossible. I prescribed the usual treatment, and returned at half-past twelve, when I again tried taxis unsuccessfully. Having read of the use of the ether spray in THE LANCET of May 4th, I determined to test its merits. I sprayed the hernia for about twenty seconds, using less than two drachms, and was much gratified to find that I was able to return the intestine with the greatest ease. The patient rapidly recovered, and has been up and attending to her domestic duties. The successful result I believe to be caused by the sudden application of cold relieving the congestion at the point of stricture.

Bedminster.

ROYAL MATERNITY CHARITY.—Sir John Lubbock, Bart., M.P. (Treasurer of the Society), occupied the chair at the triennial festival dinner, which took place at the Albion Tavern, Aldersgate-street, last week. The charity was established in 1757, and since its foundation has provided no less than 518,000 poor married lying-in women with gratuitous delivery assistance and medicine at their own homes, to which, in urgent cases, has been added material help in food &c. During last year upwards of 3600 cases were relieved, with only 11 deaths, and not all of those were due to causes pertaining to childbirth. The secretary announced subscriptions amounting to £450.

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

LONDON HOSPITAL.

OBTURATOR DISLOCATION AT HIP-JOINT, WITH SHORTENING OF LIMB.

(Under the care of Mr. RIVINGTON.)

THE number of cases of dislocation at the hip-joint which come under the care of any one surgeon, even at our largest hospitals, is comparatively few, and it is therefore important that they should be placed on record, especially when they illustrate special points in the more rare varieties of this injury. Ashhurst[1] is of opinion that this form of dislocation is most commonly produced by falling from a height and striking obliquely upon the foot or knee, so as to abduct the limb forcibly. Others consider the falling of a weight on the pelvis, when the thigh is abducted—as in the first case which Mr. Rivington published—to be the commoner cause. This is, however, comparatively unimportant. Of more importance is the question as to whether there is lengthening or shortening of the limb. Mr. Holmes, in his case—that of a muscular young man,—says that "the injured limb looked much longer than the other, but accurate and repeated measurement, taken from the spine of the ilium to fixed points in the limb on the two sides, showed that this was due entirely to twisting of the pelvis." In a case of irreducible obturator dislocation of three years' standing, which was under the care of Sir William Mac Cormac,[2] there appeared to be some shortening of the entire limb due to interference with growth. No record of the condition of the limb in the first instance could be obtained. Malgaigne found a shortening of two centimetres; Morris an inch and a quarter. The evidence in favour of shortening as an occasional symptom is thus accumulating. Sir Astley Cooper, however, stated the lengthening of the limb to be two inches. Fabbri always found from one to two inches' increased length on measurement. Hamilton[3] says "the thigh is apparently lengthened for from one to two inches," and refers to Mr. Rivington's cases in which the limb was shortened. Mr. Beck, acting as editor of Erichsen's Surgery, has not thought the evidence in favour of invariable shortening of the limb of sufficient weight to make it advisable to alter what has been taught in the past. We think, therefore, that it would be best to agree with the quotation of Mr. Pick given in the remarks, and regard shortening as a symptom occasionally met with.

Wm. P——, aged thirty, Customs' officer, a tall, muscular, well-developed man, weighing 12 st., was admitted from the receiving-room into the hospital on Jan. 7th, 1889, complaining of pain in his left hip and inability to straighten the limb so as to bring it to the ground. An hour before admission, whilst stepping from one barge to another, the patient slipped and fell between the two vessels in such a manner that almost the entire weight of his body was supported by the left leg. In point of fact he was suspended over the edge of the barge by the left leg, the inside of the knee resting on the gunwale, and the thigh being in a position of fixed abduction. He could not extricate himself, but was released by his fellow officers and brought to the hospital. On examination the thigh was found much abducted, the knee bent and incapable of extension. When the patient was in the erect position, the left leg was advanced and the body bent forward. The bending of the trunk forward enabled the patient to bring the toes to the ground, but he could not bear any weight upon them. The limb was shortened about a quarter of an inch. On the outer side of the hip, at the site of the prominence of the

[1] Encyclopædia of Surgery, vol. iii., p. 196.
[2] St. Thomas's Hospital Reports, vol. ix., p. 102.
[3] Fractures and Dislocations.

great trochanter, there was a marked depression; and on the inner side of the thigh the adductors were felt as a tense band. By passive movement the thigh could be flexed on to the abdomen to the extent of semiflexion only, and adduction was impossible. Under an anæsthetic the dislocation was readily reduced by manipulation—viz., flexion, adduction, rotation inwards, and extension. All deformity disappeared, and the movements of the joint were completely restored. A long splint was applied without extension. At the end of three weeks the patient was allowed to sit up in bed, and three days later to sit up out of bed. On Feb. 24th, twenty-nine days after the accident, he left the hospital able to walk well, slight stiffness only remaining. A month later he came to the hospital. He had resumed his employment, and the use of the limb was perfect.

Remarks by Mr. RIVINGTON.—In reporting a case of obturator dislocation of the femur in a paper in THE LANCET (Sept. 7th, 1878), I called special attention to the fact that the limb was shortened half to three-quarters of an inch, and also to the circumstance that surgical authors spoke absolutely of about two inches lengthening being a special feature of this form of dislocation. I further showed, from experiment on the cadaver, that the limb was not lengthened when the head of the femur lay over the obturator foramen. In the present case also it will be observed that there was slight shortening. Again, in a case exhibiting an unusual form of dislocation of the hip, which I have related in the Clinical Society's Transactions (vol. xvii., p. 77), and in which, I believe, the head of the bone was lying below the cotyloid cavity, there was shortening to the extent of three-eighths of an inch. If the lower limb is ever lengthened in any kind of dislocation at the hip, surely it ought to have been in this last case. Doubtless it would have been lengthened if it could have been extended, but it was slightly flexed and could not be brought down straight. The muscles prevent lengthening when the head of the femur is on a lower level than the acetabulum, and when the head is on the same level, clearly there can be no lengthening. My belief is that the traditional two inches of lengthening is an instance of defective observation, the lengthening being apparent and not real, as in the early stage of hip-joint disease. This "traditional two inches" still makes its appearance in some of the text-books (Erichsen, for instance, where no notice is taken of the cases reported where shortening has been observed). In the last edition of Holmes' Surgery, which has been very ably edited by Mr. Pick and made more systematic, it is stated that the thyroid dislocation "differs from all the other lesions about the hip-joint in the fact that the limb is really lengthened—at least it is so in some cases; while in others (as in one under my own care and another under that of Mr. Rivington) the lengthening is only apparent, and is due to inclination of the pelvis." Mr. Holmes, in reporting his case in a clinical lecture published in the *Medical Times and Gazette* in 1877, doubted the possibility of lengthening in the true thyroid displacement, and my own observations prove the correctness of Mr. Holmes' opinion. If that be so, ought not this impossible traditional two inches of lengthening in thyroid dislocations to disappear from our text-books?

CALCUTTA MEDICAL COLLEGE HOSPITAL.

THREE CASES OF NASO-PHARYNGEAL POLYPUS REMOVED AFTER SLITTING THE NOSTRIL; REMARKS.

(Under the care of Brigade Surgeon MCLEOD.)

THE following cases illustrate the ease and safety with which this description of growth can be removed by laying the nasal fossa open anteriorly. Mr. Annandale's operation consists in exposing the nares by raising the lip and nose as recommended by Rouge, the division of the bony septum of the nose, separation of the superior maxillæ in the middle line, the removal of the growth and its attachments, with subsequent plugging of the cavity and suturing of bone. We cannot afford space to even mention the different methods which have been employed for the removal of naso-pharyngeal growths. The tendency of the present day is in favour of removal through the natural passages, without extensive incision, where the tumour is of a simple character; much care being bestowed on the eradication of disease remaining after removal of the main growth, either by scraping, by the actual cautery, or in some cases by electrolysis. The subjoined notes were recorded by Assistant-Surgeon Akshoy Krishna Shaha.

CASE 1.—J——, a Mahommedan youth of twenty-five years of age, was admitted into the Medical College Hospital on March 25th, 1886, with a growth in the left nostril of two years' duration. This nostril was quite blocked, and the growth protruded through it, appearing behind the soft palate as a lump about the size of a hen's egg. The left nasal fossa was dilated and the nasal bone displaced outwards. General health indifferent. On March 27th the growth was removed under chloroform. The nostril was slit open on the left side of the septum, a strong silk thread passed through the nostril by means of a Bellocq's cannula and brought out of the mouth, and the chain of an écraseur pulled into the pharynx by this thread and passed round the fundus of the growth by the finger introduced through the mouth. The greater part of the growth was severed by working the écraseur, and removed through the mouth with a volsellum. The remainder of the tumour was seized in sections by a necrosis forceps, and thoroughly detached or twisted off from its attachment to the edge of the posterior nares (pterygoid process of the sphenoid). The finger was used as a guide to the position of these fragments, and the fact of extirpation was verified by digital examination. Bleeding was very free during this stage of the operation, but was stopped by stuffing the cavity with sponges. These were removed after an interval of ten minutes, and their place occupied by long strips of borated lint sprinkled with iodoform, the end being brought out through the nostril. The wound was finally stitched with great care with horsehair. These strips of lint were removed on the third and fourth days, and the stitches on the seventh and eighth days. The wound healed by first intention, leaving no deformity and a hardly perceptible linear scar. The cavity was syringed out daily with permanganate of potash lotion. On April 10th maggots were observed coming out of the nostril; they were got rid of in a few days by insufflation of iodoform. After this the case progressed favourably, and the patient was discharged on May 3rd, thirty-seven days after the operation, perfectly well, and without any sign of recurrence.

CASE 2.—P——, a Hindu youth, aged twenty, was admitted on June 23rd, 1888, with a tumour in the right nostril and pharynx of nine months' duration. He had had severe bleeding from the nostrils a year and a half before, which continued to recur at intervals of three or four days. The growth made its appearance in the previous October. He had undergone four operations for removal of the growth without effect. The right nostril was blocked, and a hard pale growth protruded through it. There was a lump in the pharynx which descended as far as the uvula. On June 25th an operation was performed for the removal of the growth in every particular similar to that which was done in Case 1. The loss of blood was moderate. The plugs were removed on the 27th, 28th, 29th, and 30th. The stitches were removed on the latter date, the wound having healed by first intention. He left hospital on July 3rd, eight days after the operation, perfectly well.

CASE 3.—N——, a Hindu youth, aged twenty-three, was admitted on Oct. 31st, 1888, with a tumour of the right nostril, which was greatly distended and blocked. About six months previously he began to suffer from epistaxis, and shortly afterwards the growth made its appearance through the nostril. It caused the soft palate to bulge forwards, and could be felt behind the velum palati. The tumour was hard and smooth. It was removed on Nov. 2nd, in exactly the same manner as in the two preceding cases. The bleeding was moderate. The attachment of the tumour was broad, and involved the body of the sphenoid bone. The wall of the sphenoidal cell came away with the root of the growth, and the finger could be passed into the cavity. There was very little constitutional disturbance. The plugs were removed on the 6th and 7th, and the stitches on the 8th. He left the hospital apparently quite well on the 10th, eight days after the operation.

Remarks by Dr. MCLEOD.—The growths, of which these three cases are examples, are by no means uncommon in India. They seem mainly to affect young adults, and are often allowed to grow to a very large size—until, in fact, respiration and deglutition are seriously impaired. They seem to spring from the periosteum of some part of the bony wall of the nasal cavity or roof of the pharynx, because when they are removed the bone is either stripped or, if thin,

torn away. The slitting of the nostril enables the surgeon (1) to identify the place of attachment of the growth, (2) to introduce and work the écraseur more easily, (3) to discover whether the growth has been extirpated and seize any fragments that remain, and (4) to stuff the chamber more accurately and thoroughly with sponge or lint. Rouge's operation of raising the upper lip and nostrils has the advantage of leaving no scar on the nose, but it is a severer operation than slitting, and the scar left after slitting is hardly perceptible if care is taken to stitch accurately. The procedure described by Professor Annandale in THE LANCET of Jan. 26th has the advantage of displaying the site of attachment to the eye, but in these and other cases I have found the finger give all the information that is necessary. Écrasement alone is not sufficient to extirpate these growths; they recur after apparently complete removal by the écraseur. The ablation of the bulk of the tumour by the écraseur, however, enables the surgeon to deal more intelligently and radically with the stump of the growth by avulsion. For this purpose a very strong forceps is needed. I have found an ordinary necrosis forceps to answer admirably.

Medical Societies.

PATHOLOGICAL SOCIETY OF LONDON.

Thrombosis of Aorta.—Ectopion of Cæcum.—Tubercle of Breast.—Actinomycosis Hominis.—Metacarpal Osteoma.—Multiple Symmetrical Osteomata in a Dog.—Cystine Calculus.—Psorospermiæ of Ureters.

THE last ordinary meeting of the Pathological Society of London for the present session took place on May 21st, Dr. Joseph Payne, Vice-President, being in the chair.

Dr. G. N. PITT related a case of Thrombosis of the Aorta. The thoracic aorta, in its transverse and descending arches, contained, especially on its convex and posterior surfaces, a large, flat, firmly adherent, decolourised ante-mortem clot, which was breaking down in its centre. The hæmal surface of the clot was smooth; it was five inches long. There was also a mass of clot attached to the coagulum in the ascending aorta, and some depending in the abdominal, which probably formed shortly before death. The aorta was extremely atheromatous. The specimen was taken from a man aged fifty-six, with epithelioma of the lower jaw, which was in consequence excised. The man was very feeble, and became more so after the operation, dying in a few days. During life there was nothing which suggested his local vascular trouble. Extensive thrombosis of the thoracic aorta was extremely rare, no cases having been recorded in the Transactions of this Society, nor were there any references to such cases in the books he had referred to, with the exception of one reported by Tarrand (*Prog. Méd.*, x., 1882, p. 147). There were in the museum at Guy's Hospital specimens with large ante-mortem clots at the bifurcation of the aorta, due to atheroma, and he had seen a small thrombus on an atheromatous patch, but never anything approximating the condition shown.—Dr. WEST had recorded a similar case in the Society's Transactions five or six years ago, the patient dying suddenly.—Dr. PAYNE said these extensive thromboses were very rare, and but little light had been thrown on their causation.

Mr. BATTLE then read notes of a case of Ectopion of the Cæcum with other malformations, and prolapse of small intestine through the ileo-cæcal valve, occurring in a female child twelve hours old, who was admitted into St. Thomas's Hospital on June 27th, 1888. Although supposed to have been born at full time, the child was ill-developed. There was a most unusual malformation of the anterior abdominal wall. The recently ligatured stump of the umbilical cord was attached to the summit of a large hernial protrusion, which was not covered by skin, but by tissue resembling that of the umbilical cord. Below this there was a band of true skin, immediately beneath which was a twisted finger-like protrusion, situated at the upper limit of a bulging, somewhat fiddle-shaped projection of mucous membrane, which extended to the pubes. Below the symphysis was a small red body of somewhat triangular shape, which could be pushed upwards along the vagina. There was no anus. The pelvis was small and ill-developed. No bone could be felt at the pubes. The large mucous surface was corrugated, and there were imperfect transverse folds. The finger-like projection was covered with vascular mucous membrane, and from an opening at its extremity feculent matter exuded, especially when the child strained, as it did a good deal. It appeared to be in pain. In an hour or two this projection had increased greatly, and was coiled in corkscrew curls; the child was crying and straining, and the protruded portion became more and more dark and congested. As there was evident distress, and it was impossible to reduce it from without, Mr. Battle, acting for Sir W. MacCormac, opened the abdomen and reduced the gut by traction from within the abdomen. The hernial protrusion was removed, and the abdominal wall closed in along the middle line. No bladder was seen, nor could the ureteral openings be found. The small triangular body was easily returned above the pubes, but did not remain in position. No vomiting followed the operation; there was some discharge of fæcal matter from the intestinal opening, which was attached to the middle line. The child died suddenly two days later. At the necropsy there was slight recent peritonitis. The large intestine was represented by the mucous surface referred to, which led by a pervious cord into a dilated sausage-shaped cul-de-sac in the hollow of the sacrum. The right kidney and ureter were absent. The left kidney was large, and the ureter of unusual size. The pelvis, calyces, ureters, and bladder contained a little fluid, with yellow gritty material (urates). The bladder, which was very small, lay in front of the rectum. The uterus was small and malformed. There was a small spinal meningocele, and talipes (calcaneo-varus) of the right foot. Mr. Battle referred to the rarity of the condition. He had only been able to find records of similar malformations in Ahlfeld, in an atlas by Förster (die Missbildungen des Menschen), and a reference to a case of probably similar character mentioned by Erichsen. He drew attention to the fact that there was no cloacal invagination of the anus, and referred to the theory propounded by Mr. Shattock, in explanation of ectopion of the bladder. In Ahlfeld and Förster the mucous membrane of the posterior wall of the bladder was continuous with that of the cæcum, and the openings of the large intestine, vermiform appendix, and ureter were visible; whilst the small intestine opened at the summit of a pyramid of mucous membrane at the upper limit of the mucous extrusion, as in this instance. In the case brought forward, the uterus was easily moved upwards and downwards behind the symphysis, and the bladder, if actually present, was displaced to the left and was very minute, only one ureter, the left, opening into it.—Dr. GRIFFITH asked if a pervious urethra was found.—Mr. SHATTOCK referred to a case of ectopion of the crop of a pigeon recorded by Mr. Eve, which, together with the instance related by Mr. Battle, was explained by want of closure of the originally open alimentary tube; but the bladder was from the very commencement a closed sac, and the explanation of its extroversion was different; the view which seemed to him the most probable he had recorded in an earlier number of the Society's Transactions.—Mr. BATTLE, in reply, said the urethra was pervious.

Mr. SAMUEL G. SHATTOCK gave details of a case of Tubercular Abscess of the Breast occurring in a young woman of twenty-one, admitted into St. Thomas's Hospital under Mr. Mackellar on May 19th, 1888. Her parents were alive and in good health, and there was no history of tubercle in the family. The disease appeared six years previously as a lump in the left breast about the size of a hazel-nut. A section of the breast with the contained abscess was removed by Mr. Mackellar, several diseased axillary glands being also excised. Microscopic sections of the wall of the abscess and of the caseating glands demonstrated the tubercular nature of the disease. The patient was at present well. Sir Astley Cooper, in his work on the Anatomy and Diseases of the Breast (1845), had described under the term "scrofulous swelling" cases that most clearly came under the category of tubercle; and it was a curious fact that the subject had since been so entirely overlooked by British observers. The only case the author had been able to find in modern English literature was recorded by Dr. Hebb in the last volume of the Society's Transactions. If the dictum were accepted as fairly near the truth, that every chronic abscess, wheresoever occurring, was tubercular, it must be admitted that tubercular disease of the breast, in one of its forms at least, could not be so re-

markably rare; and not only was it certain that this would prove to be the case, but that some of the cases which passed as chronic mastitis, accompanied with suppuration, would have to be placed in the same category. Tubercle of the breast was, indeed, a condition well recognised by continental observers, and had a fairly extensive bibliography. The author had collected accounts from about twenty sources. In the cow tubercle of the udder was not only well known, but its hygienic importance was fully appreciated by continental observers; its histology was fully described and figured in Virchow's *Archiv*, 1877. The milk from such cows contained bacilli, and was a ready means of infection, as was shown by experiments performed on animals. Hamilton made the remark, in his recent text-book of Pathology, that it was a matter for future determination how far the ingestion of such milk was not the cause of the mesenteric tabes so common in children. Whether the milk of a tuberculous cow whose udder was not tuberculous was infective was a question not yet satisfactorily settled. In this country Professor Crookshank had quite lately studied the subject of tubercular mastitis in the cow, and recorded his results in a form which would shortly be officially made public. In the cow mammary tubercle might be primary or secondary, and the same was true of the human subject. In Dr. Hebb's case, the patient, a woman of thirty-nine, had had eight children, five of whom had died of tuberculosis, and she herself was under treatment for many years with hæmoptysis. What was true in regard to infection in the case of the cow must be extended to the human subject. An instance was cited in which a tubercular nurse, whose milk contained bacilli, took a child born of parents who were quite well; the infant died very rapidly of tubercular meningitis. As to whether the milk of a tuberculous person in whom the breast was not diseased was infective, the same unsettled question arose as in the case of the bovine disease. With respect to the histology, the author pointed out that in the history of tuberculosis Laennec's definition was superseded by Virchow's; but he submitted that Virchow's no longer covered all the requirements of the case. Tuberculosis might exist without the presence of anatomical tubercle; and this was true even if under the latter was included the simplest tubercle system, which was practically a microscopic object. The histology of tuberculosis might be confined to a diffuse inflammation, accompanied by the presence of giant cells, the bacilli being of course present in the inflamed area. In the case under consideration this was almost true, and it held in other instances, as in lupus; though this was not of course the histology in all examples of mammary tubercle. The figures in Virchow's *Archiv* showed abundance of giant cells, but no proper tubercle systems. That which was alone essential to constitute tuberculosis was, as Koch observed, the presence of the tubercle bacillus.—Dr. HANDFORD had called attention to the rarity of the disease in the human breast, as compared with its frequency in the udder of the cow; in the latter it occurred in certain strains, especially in those with large udders, which were good milkers and frequent bearers of calves.—Mr. BATTLE related a case of strumous abscess of the breast in which there were enlarged axillary glands and a nodulated cord leading from the breast to the glands.—Mr. EVE said the term "scrofulous disease" had been applied by Astley Cooper to many cystic conditions of the breast and of the skin which were not tubercular.—Mr. R. W. PARKER believed that Colles' law held good with tuberculosis as with syphilis, that no mother suffering from constitutional tuberculosis would infect her child by suckling.—Mr. SILCOCK could only recall one case of tubercle of the breast, and in that he could find no bacilli.—Dr. PAYNE referred to a case which occurred in an infant. There was an abscess in the region of the nipple, and the child died of general tuberculosis. He thought that the bacillus of tubercle might be transmitted to human beings from the cow by milk, and that they acquired the bacillus probably from human sputum.—Mr. SHATTOCK, in reply, said that in many cases the disease had been preceded by lactation. Cooper's description of some of his cases left no doubt that they were tubercular. Congenital tuberculosis had been observed in the calf, but not in the human being.

Dr. GAMGEE and Dr. DELÉPINE related a remarkable case of Actinomycosis Hominis, occurring in a man aged sixty-five, who had suffered from abdominal abscesses of obscure origin for a considerable time. He was then attacked with chest symptoms, accompanied by weakness of the right upper extremity, which led to absolute paralysis; this was followed by similar paralysis of the right lower extremity. The muscles did not show the reaction of degeneration. Later he was attacked with a Jacksonian convulsion of the right arm, beginning in the deltoid and extending downwards. The man got gradually worse, and ultimately sank and died. Dr. Delépine described the post-mortem appearances. There were swelling of the right arm and leg, scars in the skin of both arms, thorax, and abdomen, a large multilocular abscess of the liver, and passive congestion of the lungs with chronic thickening of the pleura. There were two small tumours of the kidney. The brain contained a number of abscesses in the white matter of the frontal lobes, and several large abscesses in the upper parts of the ascending frontal and parietal and the posterior part of the upper frontal convolution; there was also a moderately large abscess in the white matter of the temporo-sphenoidal lobe, just behind the insula.—Mr. EVE called attention to a section he was showing of a liver from a case of actinomyces stained by Graves' method, which showed both clubs and threads.—Dr. PAYNE referred to a case which both clinically and to the naked eye looked like actinomycosis, but a careful microscopical search had failed to find it.—Dr. DELÉPINE, in reply, said he had found the fungus only in the larger lesions.

Mr. JONATHAN HUTCHINSON, jun., showed a case of Osteoma of Metacarpal Bone. The tumour was a smooth, oval one, with a broad attachment to the shaft of the index metacarpal at its outer side. It was the size of a small hen's egg, and pushed outwards and greatly compressed the adjacent middle metacarpal bone, filling the interosseous space and projecting into the dorsum of the hand. The specimen was obtained from an elderly man, and the tumour had existed many years. There was a history of severe injury to the part, and the tumour had during life been regarded as excessive callus following a fracture. On cutting it across, it was seen to be made up of cancellous bone, having in its centre a small, partially detached piece surrounded by granulation tissue. This central piece of bone was of a different colour to the rest of the tumour, and was apparently partially necrosed. It was probable that some slight necrosis had been set up by the injury, and that, instead of suppuration following, a large bony case had been formed around the small sequestrum. A few similar cases had been recorded by Mr. Morrant Baker and others, in some of which the great outgrowth of bone had led to the erroneous diagnosis of a malignant tumour.

Mr. W. G. SPENCER showed specimens of Multiple Symmetrical Tumours of Bone from a Dog. The specimens, consisting of bones of the fore and hind limbs with the tumours on them, showed the following points—viz.: (1) symmetry, both on fore and hind limbs; (2) the tumours advanced from the extremities as far up the fore limbs as the hind limbs; (3) the progress consisted in the growth of separate tumours from the bone which had fused with one another into lobular masses; (4) the tumours commenced on the dorsum of the fore and hind feet and extended upwards; tumours in the early stage were seen in the lower part of the femur and humerus, apparently commencing in the bone below the outer layer, being parosteal rather than periosteal in origin. The dog from whom the specimens were obtained was a fine valuable collie aged two years, having been well cared for and with no history of an accident. The disease had been noticed twelve months before as small tumours on the dorsum of the feet, which had grown much during the last six months. The tumours felt extremely hard; they caused no pain except towards the last, when slight tenderness was manifested on handling. The dog became very fat in confinement; it was killed, and no further pathological lesions were found except a scar on the lung, apparently from a parenchymatous rupture. On the limbs the skin and subcutaneous tissue, including the under surface of the feet, were normal. On the dorsum of each foot there was a mass of growth, and another surrounded the tibio-fibula and radio-ulna. The femora and humeri showed slight protuberances of bone, but there were no changes in the soft parts covering them. The tumours were not circumscribed; they had involved the muscles, and the tendons ran through and into them in grooves; fibrous extensions of the growths surrounded the tendon sheaths beyond the limits of the tumour. The tumours were fibrous on section, and a little below the surface the knife arrived at extremely hard bone, forming the base. Microscopically, the struc-

ture was that of a fibro-myxoma. Three photographs and three drawings were shown to illustrate the condition.—Dr. PAYNE thought the symmetrical arrangement suggested multiple exostosis.—Mr. BOWLBY said that the number of bones affected, and the thickening of the soft tissues over them, suggested inflammation rather than new growth.

Mr. BOWLBY related a case of Cystine Calculus with Cystinuria. The patient from whom the stone was removed was a boy aged three years, who had suffered with symptoms of stone for eight months. The stone was removed by the operation of lateral lithotomy, and the child made a good recovery. The calculus weighed 150 grains, and was oval, with a finely crystalline rough surface like a lump of loaf sugar. It was of a honey-yellow colour. The cut surface was homogeneous without lamination, and it was entirely composed of cystine. After the operation the urine was found to regularly contain cystine crystals; alteration of diet had had no influence on the daily quantity of cystine excreted. The patient's father had been cut for a stone when a child, but it had not been possible to ascertain what was its nature.—Mr. SPENCER referred to a case which had been operated on by Mr. Macnamara, and in which two calculi of pure cystine were removed.—Mr. SHATTOCK said that in St. Thomas's Hospital museum there was a cystine calculus which filled the whole pelvis of a kidney, and the liver was found to contain large quantities of cystine.—Mr. BOWLBY, in reply, thought these calculi did increase in size in the bladder; it was remarkable that there were no phosphatic incrustations on them.

Mr. EVE showed a case of Psorospermial Cysts of the Ureters. The upper parts of both these tubes were studded with cysts the size of millet-seeds, with milky contents. Microscopic sections made at right angles to the ureter showed cysts of various sizes filled with colloid material, in which were many ovoid bodies corresponding in appearance and size to pseudo-navicellæ. The patient was a woman aged fifty-one. She was taken suddenly ill, the prominent symptoms being hæmaturia with exceedingly frequent and painful micturition. Death took place from exhaustion and anæmia seventeen days after the beginning of her illness. The kidneys and bladder were healthy. Psorospermial cysts had been found beneath the capsule of the human kidney and in the liver. The disease was not uncommon in some domestic animals, and was exceedingly common in the livers of rabbits.—Dr. PAYNE believed he had once seen the condition in intestinal discharges, but it was exceedingly rare in human tissues.

The following card specimens were shown:—

Dr. PITT: Syphilitic Osteitis of both Tibiæ.

Dr. COLLIER: Hæmorrhage into Pons in a Girl of six years.

Dr. NICHOL: Membranous Casts of Trachea and Bronchi of unusual size from a case of Diphtheria with Tracheotomy.

Dr. GRIFFITH: Tubercle of Ovary.

Mr. LUNN: (1) Charcot's Disease of Shoulder; (2) Aortic Aneurysm.

Dr. MOTT: (1) Ulceration of Cæcum, with Occlusion of Ileo-cæcal Valve; (2) Extra-uterine Fœtation.

Dr. HANDFORD: (1) Malignant Infiltration of Stomach; (2) Myxo-sarcoma, sixth recurrence in twenty years; (3) Hepatitis in Enteric Fever.

Mr. S. PAGET: Occipital Meningocele, with Cleft Palate and Talipes Calcaneus.

Dr. TARGETT: (1) Sarcoma of Œsophagus; (2) Fœtal Cretinism.

Mr. RAYMOND JOHNSON: (1) Melanotic Alveolar Sarcoma of Axillary Gland; (2) Sarcoma of Submaxillary Gland; (3) Epithelioma of Bladder.

Dr. DAVIES: Lympho-sarcoma of Left Lung.

Mr. SHATTOCK: Hydrolysis of Urea by Pyogenic Cocci.

Dr. WASHBOURNE: Leprosy Bacilli.

Mr. EVE: Antinomycosis Hominis.

HARVEIAN SOCIETY.

Treatment of Scrofulous Glands.

A MEETING of the Society was held on Thursday, April 25th, Dr. Buzzard, President, in the chair.

Mr. FREDERICK TREVES, in a paper on the Treatment of Scrofulous Glands, commented upon the varied use of the terms "tuberculosis" and "scrofula" in medical literature. It had been demonstrated at one time or another that scrofula was a tubercular process, that tubercle was a scrofulous manifestation, that the two conditions were totally separate from one another, and that they were absolutely identical. Scrofula and tubercle had each played the part of a Dromio in the pathological "comedy of errors." These bewildering discussions had seriously affected the question of treatment, and had raised numerous false issues. While some surgeons had condemned all operative interference on the ground that scrofula was a purely constitutional disease, others had been reckless in the use of the knife on the ground that the affection was a purely local one. He believed that scrofulous affections were essentially tuberculous, and that the tubercular process was to be regarded merely as an inflammatory condition of a peculiar and destructive type. Phthisis, white swelling, scrofulous orchitis, caries of the spine, and strumous adenitis were forms of one pathological condition. Acute miliary tuberculosis could no more be accepted as the type of tubercular disease than could acute pyæmia be regarded as representative of the suppurative process. So far as the glands were concerned, the typical change in struma was caseation. It indicated a stage of the process, and a period in the development of the disease at which the question of operation could be best considered. The cheesy mass was in no sense of the word a deposit. It represented the débris of a chronic inflammation. It was entirely non-vascular, and could undergo no organic change. It was as much a foreign body as the sequestrum in necrosis, and would in due course excite suppuration in the tissues around and be thus got rid of. Under no circumstances could the caseous mass itself break down into pus.—Dr. SYMES THOMPSON remarked upon the relation of removal of these enlarged glands to lung disease. He had observed cases in a condition where the glands were not important surgically, and also where the lung trouble was so far advanced as to prohibit successful surgical procedure. He had not observed any increase in the lung disease from removal of these enlarged glands. Notwithstanding the existence of lung disease, the glands might be removed with benefit to the patient.—Mr. KNIGHT TREVES had had an experience of 2000 cases of this kind at Margate. He had employed most of the older methods with absolutely no good effect. The perchloride of mercury in small doses certainly did tend to diminish the size of the glands, and to control the surrounding inflammation. Since he had employed excision of these glands he had had no ill results. He, in after-treatment, insisted strongly upon the employment of pressure. He did not agree with Mr. F. Treves as to the sufficiency of the incisions he had described; many cases required much freer cutting of the whole if the mischief was to be removed. He did not altogether give up the use of the scoop, for it was available when the knife could not be employed; partial operations did more harm than good. He operated on every case if the internal organs were sound, but in no other condition. He had seen injections of these glands with iodide of starch, but it was quite useless. He considered that caseation was not essential to the anatomy of a scrofulous gland.—Mr. THORNTON of Margate had seen extremely bad results from continued poulticing. The skin was thereby made rotten, and the tissue around the gland rendered very unhealthy. There were cases where it was impossible to entirely remove the glands by the knife alone. Mr. Thornton had once wounded the jugular, and could not have tied the vessel without a long incision. The division of the sterno-mastoid was a harmless matter, and sometimes necessary.—Mr. CHRISTOPHER HEATH supported Mr. F. Treves in his objection to iodine paint. He had never known it do any good unless it blistered; at the same time, he had seen great improvement from the local application of the Kreuznach Bittern. He also spoke highly of the use of the Woodhall Spa. In a less degree, the local application of iodine was of use. As to internal remedies, he advocated the use of cod-liver oil. He doubted whether patients with a slight enlargement of the glands would suffer removal. Such glands might and did disappear spontaneously. Mr. Heath preferred enucleation to complete removal. He had never believed in the use of the actual cautery.—Mr. HILL considered that in many cases the tonsils were enlarged by the irritation of abnormal secretions of the mouth and nose. Enlargement of the tonsils could not cause a caseating gland by hypertrophy alone.—Mr. WATSON CHEYNE thought that other than caseating glands were scrofulous. A gland might be strumous before it was

noticeable. He inquired whether Mr. Treves would excise such small glands. He was averse to such very operative interference. He doubted whether the disease could always be adequately removed by operation. He recommended in some cases rest, constitutional treatment, and occasionally even injection of pure carbolic acid. Mr. Cheyne did not think scraping as good as excision, but it was nevertheless useful occasionally.—THE PRESIDENT mentioned a case in his own practice of a girl with tonic chronic torticollis which resisted treatment from the standpoint of a neuro-muscular theory. In the end a deep strumous gland suppurated, and on its healing a cure resulted of the torticollis. He suggested that in cases of the kind explained it might be desirable to cut down and seek for an irritating strumous gland.—Dr. BUZZARD believed that the present infreqnency of scrofulous glands was greatly due to the improvement of the milk-supply to the metropolis.—Mr. TREVES replied.

WEST LONDON MEDICO-CHIRURGICAL SOCIETY.

Perforation of Gastric Ulcer.—Subcutaneous Rheumatic Nodules.—Floating Kidney.

A MEETING was held on Friday, May 3rd, Dr. Travers, President, in the chair.

Mr. RICKARD W. LLOYD read a case of Perforation of a Gastric Ulcer which had caused death, and showed the stomach. The ulcer was situated on the posterior wall, and the perforation was about one-fourth of an inch in diameter. He advocated, in all cases where perforation of a gastric ulcer was diagnosed, washing out the peritoneal cavity, as likely to relieve the shock and pain; and extra-gastric alimentation for some time, which might allow the ulcer to heal. In some cases the ulcer might be excised, and the wound in the stomach stitched up.

Dr. COUTTS read a paper on Subcutaneous Rheumatic Nodules. He considered them and their association with heart disease deserving of more consideration than was usually given to them by practitioners and text-books. Nodules, being of a tangible and definite nature, furnished a much needed help in a chain of symptoms otherwise unsatisfactory. Possibly a very large number of cases of heart disease were at one time accompanied by rheumatic nodules. Nearly every case of nodules was associated with cardiac disease—in his personal experience, all. This almost invariable association had led to the supposition that masses of the same nature as these nodules might form the basis of lesions of the valves. Brief details of cases lending support to this theory were then narrated.—Dr. GARROD agreed with Dr. Coutts in regretting that so little interest was taken in the subject of rheumatic nodules by the profession at large, and in his estimate of their frequency, clinical interest, and importance. He referred to a case described by Dr. Hillier some years before the nature of these nodules was recognised, in which they were developed in large numbers in association with chorea and endocarditis.

Dr. H. T. GRIFFITHS then read a paper on Floating Kidney, giving a *résumé* of fourteen cases in which the average age was forty-one, twelve being of the right kidney. The urine was normal in ten cases, varying from a trace to one-tenth albumen in the rest. The tumour was very mobile in eight, and slightly so in six cases. In one case the heart was congenitally displaced. In 50 per cent. of the cases no tumour had been noticed before admission into hospital, and in a very small percentage was the relief demanded for the condition of the kidney. After deducing from these cases that there existed in the right side of females a condition of movable kidney which was not gravely dangerous, Dr. Griffiths dealt with the reasons of the right-sidedness, the differential diagnosis, and the treatment, advocating in the latter a properly adjusted pad and support in preference to operation.—Mr. BRUCE CLARKE, in the course of some remarks, said that in two cases that he had operated upon on the same day for something else he found the kidneys had a distinct meso-nephron.—Dr. LEITH NAPIER did not think repeated fecundity by itself was likely to produce displaced kidney, and it was difficult to accept the implied theory that the altered position of the kidney was due to loss of abdominal support, though it might be influenced by post-partum peritonitis or perimetritis, giving rise to adhesions between the pelvic and abdominal organs. The kidneys are wonderfully tolerant organs; operation is rarely needed.—Dr. ECCLES found in most cases of disturbed cardiac rhythm irritation of the solar plexus to be a frequent cause of the affection. Four cases of floating kidney associated with rapidity of heart's beat and neurasthenia had come under his care. In one case, in which the pulse was 240 (counted by an observer with a stop-watch), and whose disease had been variously diagnosed as Graves' disease, tumour in the medulla, &c., he had been able to diagnose, after reducing enormous abdominal distension by massage, a floating kidney, and this was confirmed by Dr. Brunton. The patient died from exhaustion from attacks of palpitation, always accompanied by dragging pains, in the right side.—Dr. SEYMOUR TAYLOR thought the great prevalence of floating kidney on the right side might be due to some anatomical condition, but whether it was the greater length of the renal artery on that side or the want of attachment of the right kidney to neighbouring viscera as compared with the left he could not satisfy himself. He also drew attention to the fact that in some of the lower animals, notably sheep, the kidney was always more or less movable, together with suet surrounding it, and in such animals it did not seem necessary that a true meso-nephron should be present. In association with movable kidney in neurotic patients, he drew attention to palpitation and irregular action of the heart, and cited a case in illustration.

Dr. ABRAHAM showed the new local anæsthetic, Methyl Chloride, and the apparatus for its use.

Mr. PAGET and Mr. LLOYD showed interesting pathological specimens.

ROYAL ACADEMY OF MEDICINE IN IRELAND.

Sloughing Fibroid.—Laparotomy for a Ruptured Tubal Gestation.

A MEETING of the Obstetrical Section was held on March 8th.

Dr. GRAVES exhibited for the President, who was absent, a Sloughing Fibroid. It was removed from a woman by an operation, at which he (Dr. Graves) was present. The peritoneum was very thick, and the tumour came down upon the uterus. A pint of pus came from it. There was a mass of malignant growth, and also a great many adhesions in the abdomen. The woman died.

Dr. CRANNY moved: "That the marked sympathy of the section be conveyed to the family of the late Dr. George Johnston, one of the former presidents of the section." Dr. Johnston had been Master of the Rotunda Hospital, and had given them all a great deal of valuable information in his reports connected with that institution. The resolution was passed in solemn silence.

Dr. THORNLEY STOKER read the particulars of a case in which he had performed Laparotomy for a Ruptured Tubal Gestation. The woman, who was twenty-four years of age, and who had been four years married, had the usual history of previous tubal disorder and pain on the left side—that on which the gestation had taken place. She had given birth to a stillborn fœtus at the seventh month during the year following her marriage, and had not since been pregnant. The rupture took place about the twelfth week. The case, unfortunately, did not come under his care until the eighth day after the rupture, when the woman was so exhausted by peritonitis, pain, and vomiting that operation was undertaken as a forlorn hope, with the result of death about eight hours afterwards. The case had been regarded, before he saw it, as one of intestinal obstruction. There was a broad-ligament hæmatocele in the tube as large as a hen's egg, and an enormous extravasation of blood into the peritoneum. The former was primary and the latter secondary, and probably due to the penetration into the peritoneum of the vessels of the placenta. The ovum, with the exception of the placenta, had perished at the time of the first hæmorrhage, and growth of the placenta had resulted in the fatal bleeding. The portion of the broad ligament containing the remains of the gestation was ligatured and removed, the peritoneum washed of clots and fluid blood, and the intestines, as far as possible, freed from the extensive adhesions which existed. The gestation had taken place in the tube near to the fimbriated end. He pointed to two matters of exceptional interest in the case. The first was that it constituted an example of the rare condition of a primary broad-ligament hæmatocele, followed by a secondary intra-peritoneal one. He explained his

view that the latter was not due to a rupture of the former, but to a growth and penetration of the vessels of the surviving placenta. The second exceptional feature was the rectal obstruction, due to intra-peritoneal pressure from clots. This he called attention to as disproving the statement of Mr. Lawson Tait that rectal obstruction is necessarily a sign of extra-peritoneal hæmatocele. He referred to the brilliant results obtained by operation in these cases by Mr. Tait, whose views as to the propriety of operation he strongly advocated.—Dr. BYRNE supposed one of the reasons why cases of rupture in ectopic gestation had not been oftener noticed by writers was that when a large effusion of blood took place into the peritoneum the patient generally died. There was no doubt that the treatment adopted by Dr. Stoker in his case was right. If they were convinced that there was effusion of blood into the peritoneum they should perform laparatomy, remove the clots, tie the vessels, and give the woman a chance.—Dr. HORNE said the case was interesting from a medico-legal point of view. Here was a woman brought to hospital, without any previous history, and having well-marked symptoms resembling those of poisoning. The history of the case looked very much as if the woman had had syphilis, and disease of the Fallopian tube, which would account for the impregnation taking place in the tube itself. The period at which the rupture took place, corresponding to the thirteenth week of pregnancy, was the usual time at which such ruptures occurred; they rarely happened later than the fourteenth.—Dr. O'CALLAGHAN said they had not seen any operations for cases of this sort in Ireland, and he thought that the cases must have been overlooked, for in England Mr. Lawson Tait had published a great many of them.—Dr. MACAN said that during six years' experience in the Rotunda he had seen a great many cases of extra-uterine fœtation, with hæmorrhage, and he had never operated in any case while the hæmorrhage was taking place. Once the rupture took place, they had hæmorrhage into the peritoneum, and then the question of operation or not became a most difficult one to decide. As ounce after ounce of blood passed, the bleeding lessened; and once it stopped, the woman was almost cured. Hæmorrhage into the peritoneum took place with great rapidity. If meddled with, it became a different thing. With a view to operation the thing should be ascertained before any rupture took place; after a rupture it was extremely difficult to decide on the moment to operate. When the hæmorrhage was retro-peritoneal, the woman would very likely get well without any operation. He believed that numerous cases of extra-uterine fœtation occurred and got well without any doctor seeing them at all.—Dr. STOKER, in reply, said he had mentioned that in his case the fœtus had become broken up, and the remains lay among the clots in the tube and could not be identified, but the placenta could be readily seen and its attachments studied, as it had survived the destruction of the rest of the embryo. He himself had not regarded the case as one of intestinal obstruction; what he said was that it had been so treated before it came under his observation. In fact, he had not enough evidence to prove what it was. The only thing he knew for certain was that the woman was dying of some intra-peritoneal condition that required laparotomy for its accurate diagnosis. In his paper he (Dr. Stoker) distinguished between extra-peritoneal bleeding, where the blood coagulated and dried up, and bleeding into the peritoneum. In the former cases an operation was not always called for, and the woman might make a perfect recovery without it. In the latter, where the sac of the peritoneum became a great mass of blood and clots, and the woman was dying from loss of blood, there should be no hesitation about operating.

SHEFFIELD MEDICO-CHIRURGICAL SOCIETY.

A MEETING of the Society was held on Thursday, April 11th, the President, Dr. J. W. Martin, in the chair.

Atrophy of Shoulder Muscles.—Mr. STAMFORTH showed a case of atrophy of the deltoid, supra-spinatus, infra-spinatus, biceps, and brachialis anticus. The patient, a girl twenty-one years of age, had sustained a green-stick fracture of the humerus over nineteen years previously.

Enlarged Spleen.—Dr. DYSON introduced a man with enlarged spleen. The patient was forty-five years of age, a bricklayer. He had symptoms for about a year. At first he lost flesh, but lately had improved somewhat. He had well-marked jaundice. There was a history of ague when twelve years of age. The spleen was enlarged downwards to a little below the level of the umbilicus, and had three nodules on the anterior border and some irregularities on its surface. Leukæmia, though present, was not prominent, and by no means constant. He had had while under observation several pyrexial attacks. The physical examination of the tumour strongly suggested cancer, but this was somewhat discountenanced by the patient holding his own in flesh and strength, and especially during the last two months while taking quinine and phosphorus.

Scarlatinal Albuminuria.—Dr. C. H. WILLEY remarked that this was a subject about which our knowledge was very indefinite. His main question was, Does albuminuria after scarlatina always represent one and the same condition? Hitherto the idea of an inflammatory lesion of the kidney had been much too closely associated with the appearance of albumen in the urine of convalescents. The majority he believed not to be associated with true Bright's disease. The commencement and course of the albumen, also the prognosis and treatment, varied very much. Favourable cases commenced with a large amount, whilst genuine nephritis began with a small amount, which rapidly increased. He considered this symptom, together with many concomitants, to be the result of a diminished arterial tension resulting from a loss of vaso-motor tone. The amount of albumen was always increased by influences tending to lower the tone of the nervous system from time to time. Changes in the weather had a constant effect. Dr. Willey contended that albuminuria is more a nervous or vaso-motor than a kidney symptom. Certain cases of chronic Bright's disease could be traced back to an attack of scarlatina, but that did not alter the supposition that nephritis was not present at the period of time under consideration, or present at all, in those who recovered.

Mr. SYMES exhibited photographs of a case of Knock-knee, treated by Macewen's operation; and Mr. BALDWIN a new form of Electric Light, and a new Perineal Needle.

NOTTINGHAM MEDICO-CHIRURGICAL SOCIETY.

A MEETING of this Society was held on Friday, April 26th, Dr. H. Handford, President, in the chair.

Raynaud's Disease.—Dr. CATTLE showed a man aged sixty-one, believed to be suffering from this disease. His illness commenced five months ago with pain in the soles of both feet; subsequently the second toe of the right foot became blue, and finally the distal phalanx sloughed off. He was subject at the same time to coldness and numbness of the finger ends; there was no pain in the hands, but that in the feet had never ceased and was chiefly nocturnal. At the present time there was local asphyxia of both little toes, the blue colour deepened during attacks of pain, and sometimes formed a band corresponding with the outer edge of each foot as far as the heel. In view of the patient's age the following points were enumerated as distinguishing the disease from senile gangrene: the patient's healthy aspect, absence of objective signs of fatty degeneration or atheroma, the limited extent of the gangrene, and its tendency to symmetry and recurrence.

Symblepharon of the Left Eye.—Dr. BELL TAYLOR exhibited a remarkable case where an extensive adhesion of the lower lid to the globe, the result of the destruction of the ocular and palpebral conjunctiva from the contact of molten metal, was treated by the transplantation of a large piece of skin from the upper eyelid of the right eye on to the surface of the eyeball itself. The eye was perfectly free in all its motions, and the transplanted skin (a month after the operation) was assuming the aspect of mucous membrane. Some cases were also shown where the eyeball had been excised and replaced—"optico-ciliary neurotomy"; in these cases the eyes looked quite natural and moved freely in all directions. Also several cases of double extraction for cataract; in each eye the pupil was central and moveable, vision excellent, and from the appearance of the patients, even on close scrutiny, one would not suspect that they had undergone any operation at all. Dr. Bell Taylor discussed the *pros* and *cons* for each operation.

Symmetrical Gangrene of the Face.—Drs. RANSOM and KINGDON introduced this case. The patient, a man aged forty-eight, was admitted into the General Hospital on Sept. 4th, 1888, complaining of dyspnœa and palpitation of

twelve months' duration. He had never suffered from any previous illness, was temperate in his habits, and a gardener by occupation. On admission he was cold; no pulse could be felt in either radial artery, and there was slight general anasarca. Twelve hours after admission, the nose, the front portion of each cheek, including the upper lip, the pinna of both ears, and a portion of the hard palate became suddenly of a dark damson colour, accompanied by slight general cyanosis, with marked venous stasis on the dorsum of each hand and foot. The cardiac apex was in the sixth left interspace, six inches from the mid-sternum. The heart sounds were feeble, and there was no bruit. The urine, which was at first very scanty, and contained a trace of albumen, subsequently became more abundant and free from albumen. The general cyanosis disappeared. The right ear recovered its colour on the second day, but the remaining dark patches became gangrenous, and were finally detached on the twelfth day. The patient, however, though undergoing a temporary general improvement, died on the fourteenth day after admission. At the necropsy the heart was found much dilated; there was no extensive valvular disease, but marked atheroma of the arch of the aorta, with narrowing of the lumen of the innominate and left carotid arteries at their origin, the latter being reduced to a mere chink, the sixteenth of an inch in length. The facial arteries, as far as could be ascertained, were not diseased.

At the meeting of the Society on May 3rd, a case of Elephantiasis was shown by Dr. MUTCH in a woman aged forty-five, whose right leg from knee to ankle was enormously enlarged.

Injury to Anterior Ethmoidal Cells.—Dr. MUTCH also gave notes of a case in which, after a blow with a fist on the face, air escaped from the nose into the above cavities and the cellular tissue round the eyes. The condition terminated after a few days in complete recovery.

Overcrowding.—Mr. BOOBBYER read a paper on this subject. In the first place, he gave the density of population over large areas in various parts of the world and in several modern cities, and went on to show, by the example of civilised races on the one hand, and uneducatable aborigines on the other, how that population waxed or waned with the supporting power of the area occupied and the capacity of the people for education to develop its resources. During the continuous commercial depression of the past thirteen years the birth-rate of England and Wales had fallen from 36 to 30 per 1000 per annum. After a brief description of that which constitutes overcrowding with respect to both cubical air space and superficial area of ground, he showed how pestilence, famine, and high mortality in past times had been largely fostered by the close aggregation of people in cities, together with insanitation. The deaths in London and other large towns before the present century invariably exceeded the births, and the population was only maintained by immigration from the country. He further stated that this immigration was still going on, as evidenced by the stationary rural population (with high birth-rates) and the increase of that in the towns. The necessary influence of simple density, apart from grosser insanitation, upon birth-rates and death-rates, both general and special (as indicated long ago by Dr. Farr), was probably the statistics of modern cities; these latter being given at some length. In conclusion, Mr. Boobbyer drew attention to the rapid loss of fecundity in exclusively town-bred people and animals, and suggested that the ultimate end of excessive centralisation was not degeneration but extinction.

Malignant Disease of the Stomach.—Dr. HANDFORD showed specimens from two cases of this condition, in which vomiting had been entirely absent and pain only occasionally present to a slight extent. In one case the patient (a collier) had followed his occupation to within a fortnight of his death, and had eaten ordinary food with appetite until four days before death.

Mr. MICHIE showed the following pathological specimens: (1) Hydatid Cysts from the peritoneal cavity; (2) Uterine Appendages from a case of Pyo-salpinx rupturing into the Peritoneum; (3) Uterine Appendages from a case of severe Pyo-salpinx following Gonorrhœa.

OWENS COLLEGE, MANCHESTER.—The Turner Medical Scholarship, of the value of £25, has been awarded to Mr. T. N. Kelynack.

Reviews and Notices of Books.

A System of Gynæcology by American Authors. Edited by MATTHEW D. MANN, M.D. Vol. II. Edinburgh: Young J. Pentland.

THIS book consists of 1153 pages, weighs 6½ lb., and is of the size of a family Bible. America is a great country, and this is a large book for any country. On the whole, our criticism of the first volume applies to this. The great subjects are much better treated than the minor ones. Diseases of the Vagina are treated by Dr. Charles Carroll Lee. The rarer forms, which we should certainly expect to find in a "System" are thus dismissed (page 24): "But into these it is unnecessary to enter in a short practical treatise like the present." (!) On page 18 we read: "The vaginal lymphatics empty into the large glands on either side of the pelvic cavity, and finally into the *inguinal glands.*" This is news to us. Atresia of the hymen (page 25) is said to be "caused by inflammatory adhesion of the folds of this membrane after their formation during fœtal life." The affection is commonly known as "imperforate hymen," and occupies a page and a half. No other statement as to its production is to be found but the above crude and highly debatable sentence. The article on Vaginismus (page 36) occupies a page and a half, and is meagre, crude, and unsatisfactory. It contains the usual statements—such as: "The prognosis of vaginismus is favourable," and "a cure may confidently be predicted," which, in our opinion, is directly contrary to facts, except in those (exceptional) cases where some definite lesion is found. These parts of the article should be replaced in any subsequent edition. The Hystero-neuroses are treated by Dr. Engelmann in an article of some 120 pages. It consists of an enumeration of various neuroses said to be dependent on uterine and pelvic causes, and cured by local treatment, such as replacement of the uterus, dilatation of the cervix, and Emmet's operation. The inference that symptoms have ceased not only after, but in consequence of, any such treatment seems to us founded on false logic in the case of hystero-neurosis, and we affirm our belief that for one such case "cured" by uterine treatment a thousand are rendered hopelessly incurable. This article, in our opinion, had better have been omitted. Extra-uterine Gestation is treated by Dr. T. Gaillard Thomas in twenty-two pages, and in a manner inadequate to the subject. We now come to an article really creditable to its author—viz., that on Tumours of the Breast, by Dr. Gross. We have nothing but praise for it, and recommend its perusal to our readers. A second article on the same subject by Dr. Roswell Park is also good. The next articles, Fistulæ (by Dr. Jenks), Diseases of the Bladder and Urethra (by Dr. Baker), and Non-malignant Tumours of the Uterus (by Dr. Stansbury Sutton) are all good. The difficult subject of the Malignant Diseases of the Uterus, by Dr. Lusk, is, as we should expect, good and careful. The Harveian Lectures of Dr. John Williams were not available at the time the article was written, but they seem to us to render many matters intelligible which are usually confused. It is, we believe, generally the fact that when a thing is true it is intelligible; we do not mean, let it be understood, that all intelligible things are true.

The article on Lacerations of the Cervix Uteri, by Dr. Bache M'Evers Emmet, concerns a subject which has been described as "the greatest triumph of modern surgery." That is a few years back, and the triumph has since yielded to other triumphs, such as massage and Apostoli's treatment; these to yield, no doubt, in a few months, to others, and still to others. On this subject we can only say that the opinion of the best men in our country seems to be that there is nothing in the treatment, and it is now seldom

heard of. The article contains the usual statements. The article on Chronic Inversion of the Uterus, by Dr. Busey, is a fair one. We are sorry to hear no word of condemnation, or even of caution, for the treatment (page 707) by abdominal section and dilatation by a sort of glove-stretcher, which is said to be "certainly safer than, and preferable to, amputation." The spelling "Chailley Honori" (page 709) needs correction. Injuries and Lacerations of the Perineum and Pelvic Floor are assigned to Dr. Howard Kelly, who gives a good description of the injuries and the various operations for their repair. We confess to being somewhat sceptical on the subject of the special functions assigned to various muscles and fasciæ.

Dr. Goodell supplies a good article on the Treatment of Ovarian and Extra-ovarian Tumours. On page 784 the author writes: "There are, however, cases in which tapping cannot be dispensed with; for instance, many women with ovarian tumours, having heard of cases of abdominal effusion or of abdominal cyst in which tapping was followed by a cure, will not submit to the radical operation until repeated tappings have proved to them the futility of the trocar." We cannot approve of this paragraph, on which a great deal might be written. If it is bad practice in any given case to tap an ovarian tumour, and if the medical man cannot get the consent of the patient to a radical operation, he cannot divest himself of responsibility if he does what he believes to be bad. As it was lately well put by a great obstetrician, a patient has an absolute right of veto, but none whatever of recommendation. The worst practices which disgrace our profession are done on the plea that "if I do not do it, the patient will get it done elsewhere." A "sense of goneness" is probably an American sensation, for which Englishwomen have no equivalent. On page 800 we read, "Only two assistants are needed, and they and the surgeon should take a soap bath. ..... To ensure still further protection, each one takes off his coat, waistcoat, and necktie, if they are of a material that cannot be washed. ..... A few bystanders may be permitted, but they should wear clean clothing, and should also take off their coats and waistcoats." In our opinion this is not enough. Why are boots, braces, and trousers to be spared? What about hair? No disinfection of the respiratory tract? The subject suggests two companion pictures. (1) "The surgery of the present": a group of the leading ovariotomists, clean from a soap bath, without coats, waistcoats, and neckties. (2) "The surgery of the future": a similar group without hair, eyebrows, and eyelashes; without coats, waistcoats, trousers, and boots. So far the English surgeons (who happen to be the most successful) are sadly behind the fashion. Dr. Goodell will forgive us. His article is good enough to bear a little banter.

The article on Diseases of the Ovaries is by Drs. Battey and Coe. The former writes about the operation known by his name. He sets forth its claims in a straightforward manner, but does not always define its domains. He says (page 837): "The natural change of life which occurs at the climacteric is in no sense a 'spaying' or 'castration of women,' and it is quite as inappropriate to attempt to apply either of these terms to the artificial change of life which attends upon Battey's operation." The terms objected to may or may not be correct, but we submit that a man is said to be castrated (say for cancer) even though (if he lives long enough) he will cease to be fertile some day without an operation. On page 840 we read:—

"Of the claim of Mr. Lawson Tait to the originality of this operation it is difficult to speak with certainty, owing to the ambiguity of his style of writing: at one time reporting his case as a fatal one,[1] and afterwards making the astounding discovery that his patient had recovered and regained her health;[2] at one time giving to Battey the credit of priority in the publication of his original case,[3] and at another time, with equal positiveness, claiming this priority of publication for himself.[4] The history of the time shows a few unmistakable facts—viz.: 1. Mr. Tait made no publication of his case prior to May, 1879, and then made but a bare mention of his three fatal cases, without any detailed history or statement of particulars. 2. It is equally evident that Mr. Tait could not have foreseen any of the great results which were to grow out of this operation, or he would not have remained for nine years ignorant of the fate of his first patient, whether she lived or died. 3. Mr. Tait, having published in 1873 his Hastings prize essay upon the Diseases of the Ovaries, certainly could not have foreseen any of these results, or he would have taken that occasion to put himself upon record before the medical world. In strong contrast to the reticence and modesty of Mr. Tait in bringing his work in this department before the profession, stands out in bold relief the zeal and persistency manifested by Battey." These are matters which may well be left for Mr. Tait to deal with if he pleases.

On page 843 we read, regarding the indications for the operation: "If he (Battey) be asked, 'Is the operation indicated for dysmenorrhœa, for uterine and ovarian displacements, for menorrhagia, for uterine myoma, for nymphomania, [for oöphoromania, for oöphoro-epilepsy, for malformations of [the uterus and vagina?' he answers both yes and no. The operation may be indicated in certain cases under each] and all of these headings, and contra-indicated in other cases of the same." This is oracular, but vague; it includes most of the burning questions connected with the subject, and we should have been glad of something less indefinite.

Diseases of the Ovaries are assigned to Dr. Coe, who writes, as we should expect, a good article on the subject. In the etiology of chronic oöphoritis (page 866) we are surprised to find no mention of parturition and abortion, and of alcohol. On page 890 "pelvic massage" is mentioned, without any caution as to the obvious objections to such a treatment. The subject of Diseases of the Fallopian Tubes falls to the lot of Drs. Coe and Gill Wylie. On page 911 it is stated that Dr. Battey "now not only operates for the removal of diseased tubes, but he told me only a few days since that he had resorted to abdominal sections for retroversion without disease of the appendages." We are sorry to hear it, and hope there is some mistake. The article on the Pathology of Ovarian Tumours by Dr. Stephen Howell is a good and well-illustrated article. The Clinical History and Diagnosis of Pelvic Tumours other than Uterine and Tubal is written by Dr. Mann.

The last article, on Displacements of the Uterus, by Dr. Harrison, is not without merit, but does not seem to us to master the subject. It adopts almost entirely the opinions of Schultze, from which, it is true, much is to be learnt, but which seem to us to leave much to be supplied. We so recently reviewed a translation of Schultze's work that we shall not here return at length to the subject. The conclusions of Vedeler are (page 1101) described as "most lame and impotent." This is not our opinion; on the contrary, they seem to us most valuable. Dr. Harrison would also find some valuable information in the Clinical Lectures of Dr. Matthews Duncan and in the papers of Dr. Herman in the London Obstetrical Transactions, a serial publication of which American writers seem curiously ignorant.

The second volume is much freer from clerical errors than the first, and contains several valuable articles. In another edition we would ask for a list of authorities at the end of each article, in order to avoid the prolonged search which the quotation of references in the text with subsequent marks of *loc. cit.* entails. The index is meagre. The volume does credit to the printer and publisher.

[1] Brit. Med. Jour., May 31st, 1879, p. 813.

[2] Mr. Lawson Tait: Table of Cases at International Medical Congress, Aug. 1881. [3] Tait's Diseases of the Ovaries, 1883, p. 325. [4] Ibid., p. 107.

THE LANCET.

LONDON: SATURDAY, MAY 25, 1889.

IT is often alleged as a reproach against medicine that, though an art, it is hardly a science, or at least not an exact science. This allegation has that mixture of a small amount of truth with a large amount of error which gives so many popular ideas their plausibility and their mischievous tendency. It is quite true that medicine is not scientific in the sense that algebra and geometry are scientific. Their conclusions are absolute and certain, and if there be error it is the fault of the calculator, and not of his methods. But we are too apt to regard the pure mathematical sciences as the only true sciences, forgetting that physics and biology are also sciences, and that they cannot claim mathematical accuracy and certainty in their conclusions. In truth, exactness, which many vaguely regard as the essential characteristic of all true sciences, is not found without some qualification outside the range of pure mathematics. The reason is obvious. Pure mathematics deals either, as in algebra, with arbitrary symbols to which we are at liberty to assign a perfectly unvarying significance, and in the handling of which no error need arise; or, as in geometry, with a few elementary principles which admit of rigid proof, and which constitute the foundation of all the subsequent processes. Outside this limited range perfect exactness is not attainable, because the data of our calculations become more and more complex, and conclusions in proportion more and more approximate. Take mechanics, for example—the science that makes the nearest approach to pure mathematics. What can be simpler or more precise than the three laws of motion? Yet the physicist tells us that to calculate the precise path of three bodies gravitating towards each other exceeds his powers. It would be a very ignorant deduction to infer from such an admission that mechanics was unscientific, or that a large proportion of its conclusions did not admit of the most precise statement. Or take astronomy—that science which, by the vastness of its range and the unerring precision of many of its predictions, compels our confidence and admiration perhaps more than any other; and we find that, while the astronomer will predict fifty years before the event the exact moment when the first shadow of an approaching eclipse will be cast upon the orb of the sun or moon, he is obliged to admit that in some of his calculations—those regarding the paths of some of the comets, for example—precision is not yet attainable.

We shall find, therefore, if we take a wide survey of the sciences, that they present varying degrees of exactness, that pure mathematics alone gives us perfect precision, and that even in sciences so closely allied to them as mechanics and astronomy approximation is sometimes all that is to be expected. When we come to the biological sciences, we find a new and perplexing factor—viz., life—present in all our calculations and introducing new complexities. We cannot yet give any definition satisfactory in all respects of this new factor, and it may be doubted if we shall ever fully understand it. We do not, therefore, give up in despair of exactitude those departments of knowledge which deal with life. On the contrary, we see here as elsewhere the reign of law, and we aim at a fuller comprehension of it, while frankly admitting that the principles of plant or animal life do not permit conclusions comparable in precision to those of algebra or geometry.

This is, we apprehend, the proper point of view from which to determine the claims of medicine to be reckoned a science. We find its problems the most complex of all, for not only does it deal with life, but with life disordered by disease; yet we confidently vindicate its claims to be reckoned a science on the principle of HERBERT SPENCER, that "where there is *some* prevision there is *some* science." That there is some—nay, a large—prevision in medicine no one will venture to deny. Prognosis is probably the most difficult department of practice, but no one will dispute that it admits of great perfection in proportion to the natural aptitude and the experience of the physician. We can say of some diseases, such as varicella or herpes zoster, that they will have a certain defined course and end in recovery. On the other hand, tetanus and hydrophobia afford us types of diseases that run a short and almost certainly fatal course. A third group, the specific fevers, pneumonia, &c., present a defined course, an uncertain issue, but definite dangers often occurring at definite periods, and admitting more or less of prevision when regard is had to the age, constitution, and previous habits of the individual, and the type of the attack. Then we have those diseases which are chronic in their course, but tend sooner or later to a fatal termination, such as tuberculosis, emphysema, and valvulitis. It would be tedious to illustrate further principles that the least reflection can make obvious to any practitioner of considerable experience. It is obvious that medicine admits of much prevision, even on general principles, and when we add the additional capacity which comes of ability and experience we get a prevision often of the highest order. It is true it deals for the most part only with probabilities, but it shares this disadvantage with some of the widest and most fruitful fields of science.

We cannot doubt that the present moderate amount of exactness attainable in medicine is destined to undergo a large increase. This may be expected to come in two ways—namely, through an increased knowledge of disease, and through a better understanding of physiology, and of that vague something which we call "constitution" or "diathesis." The study of this last factor is at present suffering from an opprobrium not wholly undeserved. In former ages men drew conclusions from such slender data, and dogmatised so confidently about the sanguine, the phlegmatic, the bilious, and the nervous "constitutions," that the present generation is inclined to doubt whether anything useful can be precisely formulated on this subject. Yet most observers can hardly resist the conviction that a modicum of truth lies concealed under this mountain of error. On the scientific importance of the most rigid investigation of the nature of disease all are agreed, and the increasing attention given to questions of etiology is a very satisfactory feature of the present time.

Medicine will probably never become mathematical in the

accuracy of its results; it may only very slowly approach the certainty now attending the investigations of the physical philosophers, but we cannot doubt that it is destined more and more to justify its claim to a true place among the sciences.

A MORE sensational event of a quasi-medical kind could not be imagined than that of the death of the late Mr. IRVING BISHOP, under the circumstances in which it occurred. There is a story told and retold, discussed and rediscussed for some centuries past, about the great anatomist VESALIUS, how in the zenith of his fame, in the early spring of the year 1502, he left the brilliant Court of Madrid, where, as Archiatrus to the Emperor PHILIP, he reigned supreme, and, passing through Venice to Cyprus, journeyed on pilgrimage to the Holy Land as a penance for some great offence. His offence was—so runs the story of HUBERT LANGUER—that, believing a young Spanish nobleman to be dead, he made a dissection of the body for the sake of inquiring into the cause of the illness which he had not rightly comprehended; but that, on opening the chest of the youth, he saw the heart beat. The parents, coming afterwards to a knowledge of the fact, were not satisfied with prosecuting VESALIUS for murder, but accused him to the Inquisition of impiety, with the hope that he would be punished with more severe rigour by the judges of that tribunal than by those of the common law—a fate that was inevitable, had not the Sovereign interposed and saved him on condition that, by way of atoning for ever for his error, he should undertake the pilgrimage to Palestine, from which, as it happened, he never returned to his home, but, wrecked on the island of Zante, died of starvation there. History repeats itself both in fact and fable, and now once again, either in fact or in fable, the repetition is presented. A strange erratic being falls into a state resembling death, or, as is much more likely, into real death, and the medical men who made the necropsy are accused, by one of the parents of the patient, of the awfully tragic act of opening the body of a son not dead. The parent goes so far as to advertise "BISHOP murdered," and requests all friends "and the public who condemn this unpardonable murder" to attend without further invitation at the funeral.

We do not as yet know what the particular circumstances were under which Mr. IRVING BISHOP fell into the condition of real or assumed death. The evidence on this point is most conflicting and unsatisfactory. It is asserted that he had twice been affected with what is called catalepsy, but of these attacks there is no reliable detailed medical testimony. Regarding the final seizure, we are not told whether it was a suddenly developed or a gradual seizure; but we should infer that it was quite a sudden event—so sudden that the death was supposed to have taken place without affording sufficient time for any proper attempt at restoration. Then it is affirmed that the undertakers who were summoned placed the body in an air-tight shell, in which it remained until the medical men removed it, the necropsy being conducted by them just four hours after the death, and yet, it is stated, not until distinct signs of decomposition had set in. Why the post-mortem was performed so early—why, indeed, it was performed at all without a coroner's order—does not at this stage clearly appear. One statement is that it was in accordance with the special request of the deceased that his body should be opened immediately after death, in order that it might be seen if his brain showed anything of an unusual kind. On the other hand, it is as strongly asserted that the dead man had a repugnancy to dissection, and carried about with him a written statement to that effect. In a medico-legal and medico-ethical sense it really does not matter which of these statements is correct, because if it be the fact that in a case so peculiar a necropsy was made four hours after the assumed death, and that without any attempts at restoring life, and even without the application of any of the well-known tests of death, a most serious departure from the correct course has been pursued. In such a case four hours devoted to efforts for reanimation would have been time well and properly spent, and, if all had ended in failure, four days more at least ought to have been allowed to elapse in order that every possible proof might have been afforded that death was absolute.

We have no doubt whatever, on the evidence as yet before us, that this opinion is in the strictest sense correct, but we prejudge nothing; and if the evidence so far is wrong—if it should become manifest on further inquiry that restorative measures were duly tried, and that the tests of death were faithfully carried out before the body of the unfortunate man was opened—our criticism goes for nothing, a fate we sincerely hope will await it. Meanwhile there are certain side issues which, whatever the final verdict may be, call for immediate attention. In the first place, the question comes up—Of what disease did the subject of this event die? Supposing it was catalepsy, what was the mode of death? Was it by syncope, by nervous exhaustion, by nervous pressure, by apoplexy, by sudden vascular relaxation (vascular paresis), or by sudden vascular contraction (vascular tetany)? PINEL speaks of an instance of catalepsy which terminated in apoplexy; and HOLIER, according to COPLAND, recorded an example in which after death congestion of the vessels of the brain was discovered, with slight extravasation; but really so very little is known on which we can rely, that, strictly, the pathologist, on post-mortem appearances alone, has no data on which to found a safe conclusion in respect to mode of death. Neither have we any light thrown on the subject from the lower animal world, since it is not certain that in the lower animals there is any corresponding disease. This subject of study is followed by another, which Professor GAIRDNER has very properly raised—namely, whether true catalepsy can ever so closely simulate absolute death that a skilled and careful practitioner can really be deceived. Dr. GAIRDNER thinks not, and we are inclined to agree with him. Such a case must be so rare that probably at the present hour there is not a practitioner living who could give, from facts written faithfully down at the moment of observation, a record that would carry home conviction to any half-dozen colleagues in medicine duly qualified to analyse the proofs adduced. To this also we would add that no one whatever, who would take the pains to submit to proof the eleven tests of death which were expounded and debated at the Medical Society of London a few months ago, could by any possibility make the mistake of accepting for dead a body that was alive. There is, finally, a third subject connected with this case which in public importance overrides all the rest; we mean the

madness of fostering the development of mental conditions leading to states so abnormal as that which the late Mr. IRVING BISHOP cultivated, practised, and did his best to disseminate. The tension of brain to which he subjected himself in his performances—of what good could it be, even if it enabled him to make shrewd guesses, construed from the severe practice of taking in at a glance of the eye, an acute attention of hearing, a refinement of touch, of what was not appreciable to others less observant? And what more is such tension than an exaggerated susceptibility; what more than the refinement of touch and hearing which we witness in the blind? This, and nothing more: that without necessity it brings the healthy mind, for the sake of morbid desire or art, into states of disease, the certain end whereof is the vanity of mental aberration and physical dissolution.

THE *New York Medical Record* reproduces with commendation the remarks of Dr. GOWERS (see THE LANCET, Feb. 16th) in summing up his lectures on Syphilis and the Nervous System, emphasising the one great power and hope we have for the individual, if not for the race, of limiting the spread of this terrible disease. These words were so weighty, so kind, so worthy of the profession which has to grapple with the mischief when once done, that we venture to revert to them here and to give them fresh prominence and discussion:—

"Do we do all we can—and our profession gives us power that no other has—do we do all we can to promote that perfect chastity which alone can save from this, and from that which is worse? The opinions that on pseudo-physiological grounds suggest or permit unchastity are absolutely false. Trace them to their ultimate basis and they are groundless. They rest only on sensory illusions, and 'there are no liars like our own sensations.' Rather, I should say, they rest on misinterpretations, always biased and often deliberate. With all the force that any knowledge I possess can give, and with any authority I may have, I assert—as a result of long observation and consideration of facts of every kind—that no man was ever yet the slightest degree better for incontinence; that for it every man must be the worse morally, and that most are worse physically; and in no small number the result is, and ever will be, utter physical shipwreck on one of the many rocks, sharp, jagged-edged, or on one of the many banks of festering slime that are about his course, and which no care can possibly avoid. And I am further sure that no man was ever anything but the better for perfect continence. My warning is: Let us beware lest we give even a silent sanction to that against which I am sure, on even the lowest grounds that we can take, we should resolutely set our face and raise our voice."

There are two or three points of enormous importance in these words. The first is a suggestion that there are medical men who in the exercise of their high authority do not sufficiently uphold the duty of chastity—nay, who even venture to sanction the violation of it as an advantage to men. Dr. GOWERS' words are studiously and almost laboriously impersonal, but to an attentive reader they seem obvious in their significance, and we must hope that they will be regarded by any to whom they apply. Ours is a very responsible profession. Young men are looking to us as men looked to the old type of priests who combined moral and medical functions. If clerical teachers are for the moment in less authority, we are in more, and it is of enormous moment that we realise the weight of our words, especially when they seem to be thrown into the already heavily weighted scale of human passion and inclination. Men are apt enough to err without giving them the push of medical encouragement. There is much in our profession to make us sad, but there are few sights more pitiable than to see a youth committed to all the horrors of syphilis; and if anything can add to the pain of the medical mind in witnessing this too common sight, it would be the reflection that by a careless word or the omission of a word of warning we had led a young man into such a plight. He must be a bold practitioner who would incur such a responsibility, and we would not have his experiences and reflections on any terms. This is a question in medical ethics that cannot be too constantly kept in view, and Dr. GOWERS' suggestion would lead us to think that old medical teaching may well be reasserted by our colleges. It must be remembered that on this question we stand often in a position not only of the priest, but the parent. We have opportunities of referring to it with delicacy and yet with effect, which they have not; and in all the range of human and professional responsibility there is no position more grave than ours; and, speaking from experience, we should say there is none which men, especially young men, more appreciate. A word to them from a respected medical attendant on this subject seems apt. Often it seems as a thing that they had long looked for and never had, and which in days to come they will be thankful for. There is, indeed, a quiet, searching force in Dr. GOWERS' words: "Do we do all we can," positively as well as negatively, to promote the perfect chastity of our patients? The next point of importance in the passage we republish is the strong averment of the advantages of chastity. One would scarcely have thought it necessary that Dr. GOWERS should have had to assert so trite a truism. That chastity is consistent with health is only less obvious than that unchastity is full of risk. Any man who is not sufficiently deterred by moral considerations from incurring these risks may well be, and ought to be, plied by his medical friend with the physical perils of unchastity, extending to unknown lengths of time and to further generations than his own. It is no mean set-off to a "cheerless celibacy," virtuously sustained, that it avoids the enormous risks of syphilis and other disease; and this, for Englishmen at any rate, is altogether a personal affair. The State has declined to undertake the cost and the responsibility of making unchastity safe for a man. He must indulge in it at his own risk. As he is the custodian of his own virtue, so must he be of his own health. Let him take warning from the words of Dr. GOWERS, which are full of experience and of wisdom. Few men have studied more deeply the far-reaching effects of syphilis; few can speak with more authority of the safety and advantages of the method of security he recommends—"the one method, and one alone which is possible, is sure, and open to all." We are no apologists for social customs, "social lies," that hinder marriage. Whatever is wrong in our conventional life that does so should be rectified; but let no physician or surgeon prostitute his profession or his authority, even by his silence, to sanction a vice which is appallingly common, and can only be gratified at the risk of a disease which "is rivalled by no other in its total

capacity for wrecking happiness, and health, and life." We rejoice that our American contemporaries should endorse Dr. GOWERS' medical sermon to a generation that needs it.

Though Dr. GOWERS' testimony to the importance of chastity as a means of health is the last great note sounded to Englishmen, it does not stand alone in medical literature. There is another voice which may be recalled here which will sound for generations yet, as characteristic in its ethical strength as in its medical and scientific authority. Sir JAMES PAGET, in his clinical lectures, speaking of patients that expect us to prescribe fornication, says:—

"I would just as soon prescribe theft or lying, or anything else that God has forbidden. If men will practise fornication or uncleanness, it must be of their own choice and on their sole responsibility. ..... Chastity does no harm to mind or body; its discipline is excellent; marriage can be waited for; and among the many nervous and hypochondriacal patients who have talked to me about fornication, I have never heard one say he was better or happier after it; several have said they were worse; and many, having failed, have been made much worse."

Such is the sum of professional experience and observation. We shall not reduce its effect by multiplying words.

THE Report of the Royal Commission on Higher Education in London recommends the University of London, within a reasonable time, to so remodel its constitution as to render unnecessary the foundation of a Teaching University in London distinct from the existing University. Unless it does this, a separate Teaching University will be formed, and it is therefore very important to see how far the existing University can move in the direction of satisfying the teachers and supplying the want of a Teaching University which is now officially recognised. The Association for promoting the formation of a Teaching University in London has justified its existence, inasmuch as the Royal Commissioners have practically adopted its view of the question, that University teaching must be associated with University examinations, under the direction of the same authorities, and that a substantive voice in the government of the University must be conferred upon those engaged in the work of University teaching and examination. The function of a University is to commend to students systematic courses of teaching and methods of study, for the efficiency of which it is itself responsible, and not merely to examine students in set books or subjects, regardless of how or where their knowledge has been acquired. It is known to everyone that at the University of London, in the Faculties of Arts, Laws, and Science, a very large proportion of its graduates have been practically self-taught, "private study" occurring almost as frequently in the list as "place of education" at any collegiate institution. Can the University of London form a separate "teaching side," laying down a systematic curriculum and enforcing certificates of attendance, and distinguish it and its degrees from those now given by the "examining side"? In fact, can it convert itself into a dual University, with teachers directing and governing one section, and the existing Senate ruling the other? If this cannot be done—and, with Sir WM. THOMSON, Professor STOKES, and Mr. WELLDON, we deem it scarcely possible—the existing University must undergo a profound change in order to meet the expressed want, and not one of the schemes proposed by the Senate or by Convocation goes far enough for this purpose. The latest proposal for the reconstitution of the University by a Special Committee of the Senate offers no direct powers to teachers, examiners, or teaching institutions, and cannot therefore be taken even as a basis of discussion by those who believe that the teachers are the proper persons to direct a University, and that the teaching institutions must be incorporated and identified with it, and not merely affiliated to it, for this is a mere pretence so far as any real powers are concerned. In addition to the general subject of higher education in London, the special question of granting degrees on fair terms to London medical students must be considered. During the past two or three years the existing University has made many beneficial changes in its regulations, which have materially increased the facilities for obtaining its degrees. The fundamental objection, however, remains, that they are essentially fixed on an honours and not an average pass standard, and are therefore intentionally put above the reach of the main body of students. If this standard were lowered to that which is usual in our teaching Universities, a great injustice would be inflicted on those who have prepared themselves for degrees and obtained them at the existing level, and we question if the Senate either could or would even wish to do this in direct opposition to the interests of its present graduates.

But the disadvantages under which medical students in London suffer could easily be removed by an alliance between the two teaching Colleges—University College and King's College—and the medical schools of London, as the basis of a new Teaching University. If the Royal Colleges of Physicians and Surgeons also were to associate themselves with such a movement (and unless they do this, or become in some way identified with the reforms proposed by the existing University, they may lose their pre-eminent powers with regard to medical education in London), a uniform system might be adopted, and the existing number of examinations not needlessly increased, but perhaps diminished, as first suggested in Mr. MARSHALL'S memorandum to the Teaching Association. The interests of London medical students and London medical schools will require to be carefully considered and safeguarded during the negotiations which must soon follow the publication of the Report of the Royal Commission.

PREPARATIONS have been set on foot to commemorate the foundation in 1289 by a bull of Pope Nicholas IV. of the University of Montpellier, once one of the foremost centres of learning in Europe. At a preliminary conference held on the 13th inst. under the presidency of M. Chancel, the Rector, an address was given by M. Vigié, Dean of the Law Faculty, in the course of which he sketched the progress of the University and recalled the names of many illustrious men who were connected with it. The celebration of its foundation would, he said, be not merely a local function, but would partake of a national character.

THE Duke of Portland has given £500 from his winnings in the Newmarket Stakes to the Rous Memorial Hospital. We again commend his generous example to other rich and successful owners of racehorses.

Annotations.

"Ne quid nimis."

THE COLLEGE OF PHYSICIANS AND THE HIGHER EDUCATION COMMISSION.

No time has been lost by the Royal College of Physicians in accepting the situation created by the Report of the Higher Education Commission; and it was perhaps natural that the subject should have been introduced at the meeting of the College by Dr. Allchin and Sir Risdon Bennett, who have consistently opposed the scheme to enable the two Colleges to have power to grant degrees. Nor will the recommendation of the Commission upon this proposal be much lamented, even by those who originally gave it their support. It is premature to speculate upon the line likely to be now adopted by the Royal Colleges; but of this we are certain, that if, from any fancied rights or privileges, they decide to stand aloof from the movement to found a Teaching University in London, their days as the leading powers in the medical education of the metropolis will be numbered. The select committee appointed by the College of Physicians will doubtless take a wide view of the situation; but their task will not be easy. It is noteworthy that the Universities of Cambridge and Oxford are represented on this committee, which also includes the name of one of the most active of the medical members of the Senate of the University of London.

"THE IMPORTANT EXPERIMENT IN LEICESTER."

THE Leicester sages who are preparing fuel for the flame of a terrible plague do not like to be told that they are saved in Leicester as in other places by vaccination. It is nevertheless so. We cannot answer for the matron of the small-pox hospital. This is not a personal matter. The matron may have had small-pox itself, or may be incapable of taking it—as one in a thousand may be. One swallow does not make a summer, and the escape of one person does not affect a rule that the persons answerable for looking after small-pox cases in Leicester are vaccinated and revaccinated, and that they constitute a buffer between the plague and the people which, in ordinary times like this—when week after week passes without a death from small-pox in any of the twenty-eight large towns of England, and when there is not a case of small-pox in all the London hospitals—is not very striking. But we tell Mr. T. Thomson Stephen, who writes about "the important experiment in Leicester," that there is no such thing, and that the really important experiment will be to get rid of their vaccinated staff of nurses, inspectors, and medical officers, and to meet the imported cases with unprotected persons. We challenge the Leicester authorities to this experiment, and call upon the unvaccinated to show their contempt for vaccination by meeting the disease. Mr. Stephen probably knows that he could not get a staff to meet the risk on such terms. If he does, why does he repeat that Leicester owes its security to sanitation, isolation, and disinfection? He ought to know that in making that statement he is omitting a vital part of the method which the medical officers of Leicester believe to be the protection of the town. London is as free from small-pox as Leicester. But its revaccinated citizens are much more free than the unvaccinated of Leicester—they are free to go anywhere without risk. If small-pox comes, Leicester people must stay at home or take the consequences, which, unless the millennium sets suddenly in, will be a disgusting disease—permanent disfigurement, blindness, and often death. This is the only experiment that Leicester men are trying—not on themselves, but more especially on their poor children: a noble one, surely!

FLOGGING AS A PUNISHMENT.

IN former issues we have advocated the employment of the lash as an appropriate form of punishment for certain offences—namely, those of assault with robbery and those in which firearms are found in the possession of the criminal. A considerable balance of legal opinion would probably favour the view that this apparently harsh measure is justified by necessity. It is quite otherwise, however, with the Recorder for Liverpool. In dealing with the cases which came before him at the Quarter Sessions a few days ago, he took occasion to draw a parallel between the earlier part of the present century, when flogging was approved as a punishment for all kinds of felony and misdemeanour, and our own time, in which, after an interval of abolition, the corporal penalty is again coming into use. He attributes its discontinuance to a sense of its horrors and of its hardening effect upon the judges and other officers concerned in its application, as well as to the absence of any proportionate benefit in the restraint of crime. He denies that since its revival it has exerted any considerable effect in the reduction of crime committed against the person, and he dreads a return along with its reintroduction of the old horrors and the old hardening process. A statement of this kind, coming from such a source, is not to be lightly set aside. It is noteworthy, however, that, beyond a general expression of experience in a past epoch, very little statistical proof—that of two or three cases merely—has been brought forward in its support. In the circumstances it is not remarkable that we are still unable to make our opinion on the subject coincide with that of the learned Recorder. The selection of suitable cases and the due regulation of the punishment should suffice to prevent anything like brutal violence or excess in its employment. Supported as it commonly is by an adequate term of imprisonment, its influence as a deterrent can hardly be ignored, nor are we disposed to believe that the occasional repetition of an offence thus punished by the same person is equivalent to proof that it possesses no genuine corrective power. We learn from the history of medicine that bloodletting in a similar way was first overdone and then done away with. Now we begin to see that, in parting with its abuse as a so-called panacea, we lost also its useful aid in some suitable cases. It seems as if in both instances, after oscillating between extremes, we were finding out the wisdom of a middle course.

CEREBELLAR LESIONS IN EPILEPSY.

IN 1869, MM. Luys and Voisin drew attention to lesions of the cerebellum and its peduncles in cases of epilepsy; they attributed to the lesions an important share in the production of the convulsive phenomena,—a position, as Bourneville[1] points out, untenable, because the cerebellar lesions never existed alone, but were always associated with cerebral disease. Anatomically, however, on the basis of a few rare necropsies, there seems to be some reason for ascribing the phenomena of procursive epilepsy—the "mouvements de manège," and those of rotation—to a cerebellar lesion. The impulsive motion in a straight line or around any axis of the body such as may be produced experimentally by section or irritation (even artificial capillary embolism) of certain parts of the brain are clearly dependent on some lesions of the brain, and, as Jaccoud states, there may be observed in the intervals between the epileptic attacks, phenomena attributable to the permanent brain lesion. Still the number of necropsies of patients suffering from procursive epilepsy or from procursive symptoms has been very limited. In some cases an atrophy and sclerosis of the cerebellar lobe has been found, and there have been great

[1] Recherches Cliniques et Thérapeutiques sur l'Epilepsie. Paris, 1888.

differences in weight between the right and left cerebellar and cerebral hemispheres. Adhesions of the dura mater to the brain, atrophy of the brain, thickening and œdema of the pia mater, arterial anomalies, hydrocephalus, wasting of cerebral peduncles and of the pons Varolii, of the olivary bodies and pyramids, with secondary degeneration, were noted in one very interesting case. But to which of the lesions, or to how many of them, are to be attributed the procursive phenomena, is still doubtful.

KILLED AND WOUNDED IN THE LONDON STREETS.

THE result, in killed and wounded, of accidents caused by horses and vehicles in the streets of London is of so much importance and interest that any statistics on the subject to which prominence is given should be the most trustworthy that can be obtained. Mr. J. S. Jeans recently read a paper at the Society of Arts on the street and railway traffic of the metropolis, containing some statistics of fatal street accidents, which are very far from being trustworthy. Mr. Jeans stated that his figures had been supplied to him by the Chief Commissioner of Police, but this is not the first time we have had to call attention to the fallacies which characterise many of the statistics compiled by the police. On the authority of the Chief Commissioners of the Police, Mr. Jeans stated that between 1867 and 1887 the numbers killed in the streets of London increased from 96 to 142. Now we have no reason to doubt that these numbers fairly represent the fatal cases "known to the police" and reported to headquarters, but, as we have pointed out before, such statistics give really no indication of the true number of the fatal cases. We are surprised not only that figures of this character should be furnished by the police department without due caution as to their signification, but that Mr. Jeans should have accepted them as true numbers. We have no doubt that the rank and file of the police force are duly instructed to report all cases of injury from street accidents, whether fatal or non-fatal; and we have no reason to doubt that these instructions are, generally speaking, carried out. It is obvious, however, that all such accidents cannot be known to the police, and further, that it is absolutely impossible that the police can know the result of accidents after the injured persons are removed either to their homes or to hospital. Thus cases of death in the police returns only signify those in which death is immediate, and cases in which the injured person may die an hour or two after admission to hospital are necessarily reported by the police among the cases of injury. The Registrar-General has, during the last twenty years, published returns showing the number of deaths in Registration London (practically the London of the County Council) referred each year to accidents from horses and vehicles in the streets. Let us therefore compare the police figures with those of the Registrar-General. In 1869, the first of these twenty years, the deaths from these causes were 192, whereas in 1888 they were 237; the police numbers being 96 in 1867 and 142 in 1887. Apart from the difference between the absolute numbers, the rate of increase during the twenty years was only 23 per cent. according to the Registrar-General, whereas according to the police figures it was 48 per cent. Moreover, as the population of the metropolis increased 34 per cent. during the twenty years, it follows that the proportion of fatal street accidents to population was lower in 1888 than in 1869, notwithstanding the greater congestion of the main thoroughfares. So far the Registrar-General's figures are satisfactory, and it may be further noted that, whereas the annual number of fatal street accidents increased pretty steadily from 192 in 1869 to 271 in 1882, they have since as steadily decreased to 237 in 1888. It is to be regretted that, in justice to the success apparently resulting from the police control of street traffic, the Chief Commissioner in his report should ignore the trustworthy figures of the Registrar-General, and prefer to put forward the necessarily imperfect statistics collected by the police.

EXAMINATION OF FEMALES SUSPECTED OF INFANTICIDE.

MORE than one correspondent has called attention to this subject of late. It is quite certain that a medical man has no legal right to examine the person of a woman without her consent. Even if she gave permission, it would be politic to have such in writing, in order that the medical man might be fully prepared to meet an accusation of indecent assault. We would point out that not only should a medical man not obtain the consent of the woman by entreaties or threats, but he should acquaint her that the evidence obtained by his examination might incriminate her, as no prisoner is by law compelled to give proof of his or her guilt. If the woman refuses to give permission, we know of no authority which can compel it. Clearly, neither coroners nor the police can exercise such function. Whether a magistrate would be held as acting legally if he issued an order for examination has been much discussed; but, inasmuch as there is no statute law conferring such licence, we have little doubt that the order would be illegal. We cannot find a case in point within our experience or reading. The question is a very important one, and deserves a judicial decision. Although the evidence obtainable from an examination of a suspect would be valuable, justice would not be likely to be defeated were it not forthcoming, inasmuch as a woman's refusal to be examined, taken with other circumstantial testimony, would in all probability be sufficient to warrant a conclusion being drawn. Should a wrongful committal or conviction take place, the executive authorities would be free from blame.

HEALTH OF CALCUTTA.

THE proceedings which were being taken in the High Court of Calcutta against the Sanitary Commissioners have come to a very unsatisfactory termination. An action was brought on the part of the Government and of a Mr. Beeby against the Municipal Corporation for a nuisance arising from the method adopted by it in filling up certain tanks with material quite unsuited for the purpose, and likely to prove injurious to the public health. The material so employed consisted, in a great measure at least, of the town refuse, street sweepings, kitchen refuse, and garbage, which gave out a horrible stench, and was deemed by those conversant with sanitary questions to be likely to prove a source of disease, and especially of diarrhœa and cholera. The health officer of Calcutta protested against it, but without effect. When the case came before the Court on April 29th, the Advocate-General intimated that he did not desire to prosecute. The Hon. Justice Norris, by whom the case was to be tried, refused, in the interests of the public, to permit it to be withdrawn; but, after some discussion, he found that he was bound to allow a *nolle prosequi* to be entered, although he considered it "a misfortune that this prosecution had been abandoned in this way." The Advocate-General declined to state any reason for the course he thought fit to adopt, though pressed to do so by the judge. He stated, however, that in his opinion the nuisance, "if it ever existed," is now at an end, and that the materials with which the tank had been filled in were covered "with earth to the depth of two feet nine inches, and there is only a little bit of a hole left, which is now being filled up, and which will be finished this evening.'

Mr. Justice Norris said: "I learn, I must say with profound astonishment, that the Advocate-General of Bengal declines to give a judge presiding at this sessions the reasons which have led him, in the exercise of his discretion, to advise the Government to enter a *nolle prosequi*. I have read the depositions carefully, and may say that in the face of the depositions there appears to me an ample case of gross nuisance—a nuisance endangering the health and lives of Her Majesty's subjects in Calcutta." There unfortunately appears to be no security that the Municipal Corporation may not repeat this unjustifiable method of filling up tanks in the midst of a crowded population living under conditions likely to promote the development of endemic and epidemic diseases. In a city like Calcutta such a mode of getting rid of town refuse ought to be prohibited under most stringent penalties. If there is any difficulty in removing it to a place where it would not be likely to affect public health, the remedy is obvious in the erection of "destructors" in suitable localities, and by the agency of fire converting the noxious material into a useful and harmless product. We sincerely hope the inhabitants of Calcutta will keep a sharp look-out on the proceedings of their municipal representatives, in case they show any disposition to repeat their insanitary expedient, notwithstanding the strongly expressed opinion of the judge. The pecuniary saving effected by thus disposing of their refuse would be dearly bought by the loss of life and health which would inevitably result from an outbreak of epidemic disease.

THE CHOLERA PANIC IN FLORENCE.

A FLORENTINE CORRESPONDENT writes:—The superintendent and vice-superintendent of the Bonifazio and S. Lucia Hospitals have been suspended for grave dereliction of duty, in consequence of the report of the Commission of Inquiry on the violent outburst of diarrhœa in these institutions which happened on the night of March 21st. It will be remembered that, to allay the alarm into which Florence was thrown by this occurrence, the Commission published an interim report, in which it was clearly set forth that the symptoms were not those of cholera. This announcement had the desired effect; and now the report in chief has been issued, embodying the results of a stringent interrogatory of the superintendent, the vice-superintendent, the physicians, and the subordinate *personnel* of the hospitals. The Commission finds that 168 was the number of persons in whom the acute diarrhœa was manifested, and that the symptoms were incontestably due to certain matters contained in the food (soup and meat) which was served out at 4 P.M. on March 21st. Reflecting severely on the conduct of those in charge of the clinical and culinary departments for having, wittingly or unwittingly, omitted to preserve some portion, however small, of the food or of the alvine dejections for purposes of chemical and microscopical analysis, the Commission proceeds to exclude, as possible sources of the mischief, the water, the wine, the "pasta" (maccaroni), the bread, the potato, the tomato, the oil, and the salt, and thereafter restricts the cause of the diarrhœa to some toxic matter conveyed in or along with the soup or meat. The latter, as served out from the public slaughterhouses on March 21st was found by the veterinary officer of the municipality to have come from animals quite free from disease, and was certified by the distributor and the cooks to have presented no sign whatever of taint or incipient putrefaction. Both meat and soup, however, were discovered to have been kept in copper vessels for some hours before being served out—vessels which, in spite of the superintendent having had them them cleaned, re-lined, and re-soldered subsequently to the outbreak, and prior to the Commission of Inquiry, presented distinct traces of rancid grease, highly suspicious in colour. This condition of the vessels was admitted by the culinary *personnel*, and the greasy substance in question, both in its chemical and clinical characters, was held by the Commission to have formed the "condition precedent" of the diarrhœic gastro-enteritis. The toxic agent, it appears, took effect only eight or ten hours after consumption, and during the period of intestinal digestion, and acted on the nervous system "without those premonitory manifestations peculiar to an alkaloid substance of vegetable or animal nature, and with a somewhat rapid return to cure, leaving no specific consecutive phenomena." Hence the Commission concludes that the visceral disturbances in the 168 cases are to be attributed "to the toxic action of a mineral salt formed in the copper vessels above referred to, and contaminating the soup and meat served out on March 21st." The exemplary punishment inflicted on the two heads of the hospitals has made a profound impression in Florentine circles, both professional and lay; some holding it to be too severe as applied to men whose previous character was unblemished; others maintaining it to have been richly earned, in view of the absolute disappearance of the food or alvine dejections required for analysis, and considering the hasty scouring and resoldering of the copper vessels. A salutary warning meanwhile will have been conveyed to those responsible for the management of hospitals in Italy to bring the cleanliness and tidiness of these somewhat nearer that British standard which, by the admission of the best Italian clinicians, constitutes by no means the least "title of honour" in the medical institutions of these islands.

ELECTRIC LIGHTING IN LONDON.

MAJOR MARINDIN'S report to the Board of Trade, in reference to the applications made under the Acts of 1882 and 1888 for powers of electric lighting in the metropolis, was issued last Saturday. In his report Major Marindin states that, after careful consideration of all the evidence and arguments, he has arrived at the conclusion that the science of electric lighting has now reached the point at which a supply can be made which will be of very great benefit to the public, and should be within reach of all who may require it. The report goes into elaborate details as to the division of districts between rival companies, and suggests that for the present powers should not be given to more than two companies over the same area, one company to use the system of supplying electricity by alternating currents and transformers, and the other company by employing continuous currents. The report provides for the abolition of overhead in favour of underground wires, and further recommends that at the end of forty-two years the local authorities shall have the option of purchasing the various electric properties at a fair valuation, and taking the lighting into their own hands.

BROMOMANIA.

WE commend to the serious attention of practitioners the short but very suggestive paper of Dr. George Thompson in our issue of May 11th, on the question of Special Hospitals for the early treatment of the Insane, and especially to the closing paragraph of the paper. There are few new remedies for which practitioners would be ready to express more gratitude than the bromides. But if Dr. Thompson is right, they are far too much used, and are even used very disastrously. In one disease—epilepsy—in which they have been thought conspicuously useful, they are capable of being much abused. Such patients, according to Dr. Thompson, are "drenched," chiefly at the out-patient departments, with bromide of potassium, till a form of bromomania, now well recognised in asylums, is established, and the epileptic, who fifty years ago passed easily through life, has to be put under restraint. We

hope Dr. Thompson will elaborate his views a little more, even if this involves a substantiation of the charge he brings against medical men of imperfect acquaintance with mental disease. It could scarcely be otherwise, for those mentally diseased are carefully shut up in asylums, and medical students are to a large extent as carefully shut out of them. Every experienced practitioner, however, must have noticed that the bromides are not so harmless as they were thought to be, and that in some patients they produce a serious impairment and depression of nervous function.

THE ROYAL COMMISSION ON VACCINATION.

IN a printed communication which we have received, Dr. Robert Pringle, formerly of the Sanitary Department of Her Majesty's Bengal Army, suggests a number of questions which it is desirable that the Royal Commission on Vaccination should inquire into. Basing his opinion on the experience he obtained in India, it is evident that he is no believer in the loss of immunity from small-pox which ensues as the result of lapse of time after vaccination; and in this connexion he refers to "the natural law of eruptive fevers," which is to the effect that one attack grants a life-long immunity from another. But this law, as regards some of the eruptive fevers other than small-pox, is marked by numerous exceptions; and, in the instance under discussion, it must be remembered that a vaccinated person can hardly be regarded as having suffered from small-pox, and hence is not in the same position as regards future immunity from this affection as a typhoid patient would be from a subsequent attack of the latter disease. Dr. Pringle also takes considerable exception to the use of clamps, as they are applied to the base of the cow-pox eruption in the case of calves from which lymph is taken for vaccination purposes; and he is evidently inclined to think that owing to this practice "inflammatory serum" gets mingled with the lymph. The results of the use of calf lymph in this country hardly bear out the contention, but it is satisfactory to know that these and other points which are referred to will be included in the reference to the Royal Commission, and that all needed evidence on them will be procured.

BABY-FARMING AGAIN.

IN our issue of Oct. 13th, 1888, we directed attention to a number of cases of baby-farming with which the name of a Mrs. Arnold was prominently associated. An inquest held some ten days ago by Mr. Worley, coroner, at Newport Pagnall, has elicited some very unsatisfactory details respecting the life and death of another nursling entrusted to the same person. In this instance, the child, a boy, when a month old, was received by Mrs. Arnold from his supposed father, and, in accordance with her usual practice, transferred to the keeping of another woman, Jessie Chapman. With her he remained for more than a year, during which period he is is said to have been in very weak health. A sum of 25s. per month was allowed for his maintenance, but was not regularly paid, as more than twice that sum was owing to Chapman at the end of the year. After this he dragged out for a time a wretched existence in the house of the latter, and ultimately died in her charge at the age of two years and a half. A post-mortem examination revealed no physical change of note beyond a shrunken condition of the stomach and bowel and some bruises attributed to accidental falls. A remarkable ambiguity distinguished the evidence respecting the child's parentage. According to Mrs. Arnold's deposition in court the mother was unknown to her. In letters to Chapman, which she admitted having written, more positive assertions were made. The first affirmed that the mother died in her confinement. The next purported to come from the mother herself. Other statements gave different versions on this point. The father, though described by name and address, cannot be found. All that is known of him is that he gave £30 with the child. Any letters from him to Arnold have been destroyed by her. It is not surprising, therefore, that the jury, after learning all the meagre facts of this case, and finding some of its most important particulars veiled in mystery, so convenient for an accused person, have had their suspicions aroused, and have desired a further investigation as to the actual cause of the child's death. Arnold appears in this as in other cases to have acted as an intermediary between the parents of children who had become a burden to them and certain women who, besides a trifling money profit, had no inducement to discharge the duties of a careful mother. Her position is exactly that of the middleman. The more she receives with a child and the less her expenditure upon it, the greater her pecuniary gain. It is obvious that so purely commercial a system of nursing may easily be made to work to the prejudice of the infant and the advantage of its guardian. The antecedents of the woman and her latest appearance in the witness-box cannot fail to suggest very strongly that in her case a regard for self-interest has far outweighed any consideration for her nurse-children. It is possible, nevertheless, that defects of evidence may enable her to evade a legal penalty. Be this as it may, the disclosures of the present inquiry cannot but convince any candid person that such legal provision must be made as will ensure that due responsibility for the safety of any nurse-child shall rest upon its primary trustee.

EXPERIMENTS ON LIVING ANIMALS.

MR. ERICHSEN'S report upon vivisection during the past year bears ample testimony to the care and exactitude with which the regulations of the Act of 1876 are habitually carried out by all concerned. The administration of the Act is a matter entirely distinct from any question as to its policy, and although we are by no means prepared to think that it was wisely conceived or well devised, we are on that account the more gratified to find that by the hearty co-operation of the experimenters it is being rendered effective of some measure of benefit to the animals which it is intended to protect. Thus Mr. Erichsen says: "It is a matter of very great satisfaction to find, by the reports furnished to me this year, that the cases in which pain has unavoidably been inflicted were far fewer in number than in preceding years. As may be seen by Table III., only eight experiments were reported as having been attended by pain, the animals in these cases being rabbits, guinea-pigs, mice, and frogs. In the attainment of this gratifying result every assistance has been afforded by the licensees, who, I have reason to believe, spare no trouble, by the use of anæsthetics often applied locally in addition to their internal administration, and by the employment of strict antiseptic precautions, to secure freedom from suffering in the animals experimented upon." These remarks are no doubt intended to express the Inspector's sense of the scrupulous care to avoid, so far as possible, the infliction of pain which still distinguishes our physiologists and pathologists when experimenting upon living subjects, as it always has distinguished them heretofore. But it seems to us that it would be more satisfactory to substitute for observations of this kind some indication of the important results which the vivisection reported upon has achieved. In this respect the form of this report leaves much to be desired. The public are informed that 1069 experiments have been performed, and that of these 231 have been directed to the elucidation of physiological questions, 499 of pathological, and 339 of therapeutical. But such generalised statements convey no information,

and, as the results of research in these directions are for the most part wholly unknown to those to whom these figures and comments are addressed, it can hardly be otherwise than that they will produce an unfavourable impression. Much of the work is, no doubt, of a kind the value and beneficence of which cannot be appreciated by the public, and therein lies a real difficulty, which it will tax great ingenuity to overcome.

SMALL-POX AND VACCINATION IN BELGIUM.

IN Belgium there is no law compelling parents to have their children vaccinated; and though children before admission to school, and workmen sometimes before being employed on public works, are usually obliged to show a certificate of having been vaccinated, there is a very large number of totally unvaccinated persons in the country—more, probably, than in most other European countries. Besides, revaccination is rather the exception than the rule, and primary vaccination is too often very inefficiently performed, so that when an epidemic of small-pox comes it claims a great many victims. Dr. Titeca has recently been endeavouring to stir up professional opinion on the subject of the sadly unprotected state of his fellow-countrymen; and Dr. Dejace has just written an article in the *Scalpel* in which he mentions what occurred in his own locality when there was an epidemic. There were 107 cases amongst non-vaccinated and 68 amongst vaccinated. Of the first mentioned series, however, more than 80 per cent. were serious, and amongst the second or more or less protected cases there were under 14 per cent. of grave cases. Again, in the Belgian army, where vaccination and revaccination are required, there is a minimum of small-pox. There is, it seems, an anti-vaccination league, but this body finds little need to carry on an active propaganda, as indifferentism, which is peculiarly rife in Belgium, seems to answer its purpose. Medical men are attempting to influence public opinion in favour of a compulsory law, but it is very doubtful if they will get many people to listen to good advice.

KASHMIR MISSION HOSPITAL.

A LARGE amount of important and successful surgical work is carried out at a very moderate expense at the Mission Hospital in Kashmir, which is worked by Messrs. Arthur and Ernest Neve, medical missionaries of the Church Missionary Society. From the report for last year, which has just reached us, we learn that the total expense of the hospital, including everything except the missionaries' allowances, was only about 5500 rupees. The amount of work done may be stated roughly as follows: in-patients 500, out-patients 13,000; major operations 500, minor operations 1500. The success, too, has been remarkably good, only two operation cases having died. The causes of this success are believed to be—(1) the rigid carrying out, by the surgeons' own hands, of the antiseptic system, the medical missionaries having both been pupils of Sir J. Lister and Professor Chiene in Edinburgh; (2) the temperate climate, at an elevation of 5200 feet above the sea, and a very airy building. With regard to the dressings used, the report says: "We use sawdust bags more largely than anything else. Muslin bags, of various shapes and sizes, are steeped in perchloride of mercury lotion and then dried. Cedar-wood sawdust is treated similarly, and the bags are filled with this. For each case one or more of these is used as required. Some of these bags are square, others long and thin, triangular, or any other shape found useful. They are found to conform with all the requirements above mentioned, and in addition are valuable as pads or splints. It may be observed that the cost of sawdust is about sixpence per hundredweight. Perhaps in the course of a year we may use rather more than six hundredweights of sawdust—a total cost of three shillings, and this for over three thousand dressings." In special or important cases carbolised or iodoform gauze is used, and often also the sal-alembroth wool: but by the use of sawdust bags as an auxiliary a small quantity of these more expensive dressings is often made to go a very long way. The muslin bags after use are washed and then soaked in perchloride of mercury lotion for several hours. This the missionaries have been inclined to regard as a possible weak point in their antiseptic chain, though they have so far failed to prove that it is a source of danger.

EXAMINATIONS AT THE UNIVERSITY OF LONDON.

THE Calendar for 1889-90, containing the recent alterations in the regulations for the degrees of this University has just been published. The Matriculation Examination will this year and for the future commence on the second Monday in June. Botany is now an optional subject. The changes affecting the degrees in Science and the Preliminary Scientific M.B. Examination will not take effect until 1890, but a rearrangement of the Pass and Honours Examinations for the Intermediate M.B. Examination will come into force in July next. "The Pass and Honours questions will be given on one and the same paper, and will be divided into (*a*) Pass questions and (*b*) Honours questions. Candidates will be allowed to answer questions of either or both groups, but no credit will be given for more than half of the total number of questions, of which half, in the case of candidates for Honours, one-third must be taken from group *b*." Candidates for the degrees of M.D. and M.S. now have the option of presenting a thesis, and "State Medicine" has been introduced as an alternative branch of the M.D. Examination.

CHILDREN IN THEATRES.

THE statements made by a deputation of theatrical managers and others to the Under Secretary at the Home Office are of interest as describing child-life in the theatre from an actor's point of view. Among the speakers on this occasion were Mr. Henry Irving, Mr. Augustus Harris, Mr. Lobb (who spoke as a member of the School Board), Madame Lanner (a trainer attached to the establishment in Drury-lane), and others well known in the dramatic world. All agreed in declaring that the life of children employed on the stage was in every way wholesome and enjoyable. The idea that they could suffer any mental or moral harm as a consequence of their position was an entire delusion. The work was no labour, but a pleasure, and the envy of less favoured children. As for education, the rehearsals and performances in themselves constituted a training in art; while the solids of culture, as Mr. Harris's school had shown, could be provided within the theatre in such a manner as to satisfy a qualified inspector. So far the evidence appears in every way favourable to the views of the deputation. More closely examined, however, it exhibits weak points, which, if not of the greatest moment, are still too real to be overlooked. We are told, on the one hand, that there is no labour properly so-called; and this expression may be true if its meaning be limited to the mere business of the stage itself. When, however, we find that at Drury-lane Theatre, for example, school work is kept up for the usual five hours per day, while rehearsal is carried on during the midday interval, and sometimes after school is over also, the day's duty in one way or other going on till 10 P.M., we confess to some doubt as to the child's enjoyment or physical advantage. The period of employment introduces another difficulty. Mr. Irving mentions two months as the annual deduction from regular school

attendance in the case of children on the stage. Mr. Harris speaks of four months' theatrical work done during the present year, and of a further prospect of similar employment during the summer months. Now, after making every allowance for the school at Drury-lane, a term of more than half a year abstracted from the regular course of education, and largely devoted to dramatic pursuits, must be considered excessive in the case of young children. The age at which some of these are employed (as early as five years) is also by no means compatible with the business, bustle, frequently close atmosphere, and late hours of a theatrical calling. Public opinion may not perhaps, in the words of the Under Secretary, support a crusade against the employment of children in pantomimes. We confess, however, that we do not see why this form of occupation alone should be altogether exempt from regulations affecting age, and devised in the interest of health and education. The age of nine years has been proposed as the earliest period at which a child should be allowed to act, and this proposal, if carried, would probably suit a majority of cases. Adequate provision must at all times be made for school-training, and we should be careful about entrusting employers generally with the privilege of an experiment in education allowed to Mr. Harris.

THE NOTIFICATION QUESTION AT KIDDERMINSTER.

A DISCUSSION on notification at Kidderminster demands attention on one or two grounds—chiefly because of a compromise arrived at between the Health Committee and the profession in a friendly conference, to this effect: that a general measure seeming imminent, and the obtaining of a local measure being likely to involve the town in an expense of several hundred pounds, the medical men agreed to notify cases of infectious disease occurring in their practice, the sanitary authority consent to pay 2*s.* 6*d.* for each case, and to take no action in those cases where the medical man certifies that all necessary precautions were being taken, and that an examination of the premises is unnecessary. This compromise will at least be likely to work harmoniously, as both parties have agreed to it with the exception of one medical man. We shall be curious to see how it works in a sanitary respect. It throws rather a large responsibility on the medical men, as guaranteeing both the precautions and the premises. Another point of interest in the discussion was the remark of the ex-Mayor, who asked if the public-spirit of the medical men was not large enough to report cases without being paid "the wretched half-crown." The ex-Mayor was so thoroughly rated for this remark in the Town Council, and subsequently by the *Kidderminster Sun*, that we do not feel it necessary to be very hard on him. But his remark was made thoughtlessly. Why should medical men, in addition to all their gratuitous work, serve a corporation like that of Kidderminster for nothing? The medical profession has itself somewhat to blame for the lightness with which men speak of it and the beggarly way in which they look for its help. The only cure is in not making itself so cheap in future.

PROLAPSUS UTERI.

DR. CANDELA PLÁ, Professor of Midwifery and Gynæcology in the Faculty of Medicine of Valencia, records in *La Medicina Práctica* an operation which he performed with satisfactory results on a patient of forty years of age, who suffered severely from prolapsus uteri, occasioning a feeling of heaviness and pain in the lower part of the abdomen, lumbago, dysuria, leucorrhœa, and other troubles common in this affection. The os was found between the labia, and there was a slight prolapsus of the anterior wall of the vagina; in addition, there was endocervicitis, without ectropion, but with some hypertrophy of the lower part of the cervix. The endocervicitis was treated, and a Gariel's pessary, No. 9, applied. Some five months later, after antiseptic precautions had been taken, the operation was performed. First of all, the os was dilated to the extent of three millimetres by means of a laminaria tent. The needle used was tubulated, and had a curve similar to that of a uterine sound; this was introduced into the uterus, and pushed through the fundus and the abdominal wall; a metallic wire was then passed through it, and the needle withdrawn, leaving the wire *in situ;* the two extremities were then secured, and the patient put to bed in the supine position, which was that in which the operation had been performed. There were subsequently some slight rise of temperature and vomiting; there was also frequent desire to micturate, which was combated by the application of ice and hypodermic injections of morphia. On the tenth day the suture was removed, and on the fourteenth day the patient was allowed to get up. Two months after the operation she had completely recovered.

THE CONDITION OF THE PROFESSION IN GERMANY.

IN an address to a German medical society Dr. Hüllmann of Halle discusses the ever-interesting theme of the state of the profession and the outlook for the future, which in Germany is no more promising than it appears to be in this country. The main causes accounting for the unsatisfactory position in which medical men find themselves are, he considers—(1) the increase in the number of practitioners as compared with that of the population; (2) the low remuneration offered by clubs, and the competition for appointments which bring in but little more than the pay of an artisan; and (3) the continued development of specialism. He goes on to show that there has been a steady increase in the proportion of practitioners to population—from 3·33 for each 10,000 in 1883 to 3·77 for each 10,000 in 1888. The remedies he suggests are to limit the number of men entering the profession, and also the number of specialists. He remarks that at present the course for the medical student is shorter than that for students of any other learned profession, for only four years are obligatory; while a lawyer has, in addition to his three and a half years' study at the university, to spend an equal period in learning the practical duties of his profession; a pastor has, after his university general studies, to spend two or three years as "Candidat"; and a schoolmaster must after his university course work for a probationary year before he can obtain the grade of assistant master. Considering the immense amount of scientific knowledge that a medical man ought to acquire, five years would, in his opinion, seem to be the very least that ought to be enjoined, and if a knowledge of mental diseases and hygiene is to be attained, a longer period will be necessary. The minimum period of study, too, he said, is less in Germany than in any other European country, all the others requiring from five to seven years, Sweden as much as ten. Dr. Hüllmann apparently has overlooked the regulations in force in Great Britain, to say nothing of those of one or two other European countries, where four years is still the minimum. He considered that not only should the time be lengthened, but the examinations should be made more stringent, there being at present too great laxity, and the severity being less than in most other countries. Dr. Hüllmann thinks it a bad plan to allow a student to be examined in his own university and by his own teachers. He would have, too, an outside examiner, not a teacher but a practitioner, as assessor, and in various other ways he would make the examinations more difficult and more practical. Regarding

specialists, he recommends that they should be made to pass high examinations in their own subjects, and that they should be compelled to practise generally several years before being admitted as candidates for the specialist diploma. He appears to have but little faith in the capacities of medical societies for assisting to raise the position and emoluments of medical men, remarking that they have not been found to exercise much control over their own members, and therefore cannot be expected to exercise any at all over outsiders.

AN EXPLORING CANNULA FOR SOLID TUMOURS.

IN a paper read at a recent meeting of the Gynæcological Society of Boston, Dr. J. Collins Warren advocated the use of a little instrument devised by Dr. S. J. Mixter. It consists of a fine cannula with a sharp-cutting edge. It is used as follows. An injection of cocaine is first given; then with a tenotome a puncture is made through the skin, and through this the cannula is thrust into the tumour to be explored; it is then withdrawn half an inch, its direction altered, and a second thrust made. It is afterwards wholly withdrawn, one finger being placed over the outer end. By this means a small mass of the tumour is removed, from which sections can be at once cut on the freezing microtome, or later on after hardening. Specimens of a tumour an inch or more in length and an eighth of an inch in diameter can be removed in this way, and they afford ample material for microscopic investigation. The instrument is designed to assist in the diagnosis of the earliest stages of scirrhus of the breast, or of any conditions in which the microscope alone can lead the surgeon to a definite decision as to the nature of a solid mass. Dr. Warren, an accomplished surgeon, spoke highly of the instrument, and pointed out that by it the pathologist could obtain a specimen of the whole depth of a tumour—not of its central parts merely—and of the surrounding tissues, showing the mode of its invasion by the neoplasm.

CLINICAL MICRO-BIOLOGY.

UNDER the above title, a course of lectures by Dr. Gabriel Roux, *chef de clinique* to Professor Boudet at Lyons, is being published in our contemporary *La Province Médicale*. The subject is to be dealt with under the following heads:—1. The clinical bacterioscopical laboratory. 2. Germs, their preparation for microscopical examination and cultivation. 3. The skin and cavities accessible to air. 4. Sputa. 5. Contents of stomach and intestine. 6. Genito-urinary organs; urine. 7. Blood; internal organs. 8. Necropsies from the bacteriological standpoint. 9. Summary of obviously microbic diseases. 10. Experimentation on animals. 11. Bacterioscopic analysis of water and air.

DISHORNING CATTLE DECLARED TO BE ILLEGAL.

A FEW weeks ago, in an article on the dishorning of cattle, we mentioned a case in which the legality of this proceeding had been called in question. Judgment was recently delivered in this case by Lord Coleridge and Mr. Justice Hawkins. The decision then arrived at is the more important because, while dealing with a particular instance, it implied a condemnation of this cruel practice under the various conditions which have been said to excuse it. Neither when performed in order to allow of the closer packing of cattle, nor when done to prevent mutual injury by goring, least of all when intended to destroy an evidence of age, did the operation commend itself to either judge as useful or necessary. Consequently it comes within the scope of the Cruelty to Animals Act, and is lawfully punishable. This judgment, given after lengthy and careful consideration of the subject, will go far to bury in disuse a custom already nearly obsolete. It will not affect the interests of the great body of stock-raising farmers who have discarded this practice, but will act as a needed restraint upon the rough-and-ready surgery approved by the dishorning minority.

RETURNS OF DISEASE FROM NOTIFICATION TOWNS.

THE compilation of returns of infectious diseases from the English towns having a system of compulsory notification, which was originally organised under Dr. Tatham's supervision, has now for some months past been regularly transferred to the Local Government Board. From nearly fifty notification towns, the returns, which were formerly despatched to Dr. Tatham, are now forwarded to Whitehall, where they are compiled in a tabular form; and to the medical officer of health of each contributing sanitary authority a complete return of the number of cases notified from the several diseases in each of the towns concerned is at once despatched. In this way the notifying sanitary districts work hand in hand, supplying each other with information that is calculated to be of material use in connexion with the possible importation of disease from without. The names and actual residences of the sick never formed part of the information supplied, and the return was held to be of a confidential nature. This practice is very properly maintained under the new arrangements. To Dr. Tatham much credit is due for this first instalment of a public record of infectious sickness.

THE RETINA IN ANÆMIC CONDITIONS.

DR. ARTHUR FRIEDRICHSON, of Dorpat, has published as an inaugural dissertation a set of observations made with the ophthalmoscope on patients with anæmia, chlorosis, and other general diseases. He finds that in chlorosis and in anæmia consequent on hæmorrhage the ophthalmoscope reveals either no morbid change at all, or merely a certain amount of hyperæmia of the retinal vessels. The transparency of the retinal vessels appears to depend upon the amount of hæmoglobin contained in the blood, but it is especially well marked when there is at the same time a diminution in the number of the red corpuscles. When the anæmia is due to hæmorrhage, and also in chlorosis, the pulsations of the retinal arteries have the appearance of being mainly "locomotory" movements, whereas in the anæmia of neurasthenic patients they present very frequently that of changes in the calibre of the vessels. Dr. Friedrichson found the appearance known as Helfreich's progressive venous pulse very frequently in valvular disease of the heart.

LIBRARIES AND INFECTION.

THE transference of infectious disease through the medium of circulating libraries continues to attract attention. Among the latest suggestions dealing with the subject is one recently brought before the vestry of St. Mary's parish, Battersea, by Mr. J. J. Joseph, that the Local Government Board be advised to take such legislative action as will enable it to impose a penalty on any inmate of an infected house who may make use of books in circulation without notifying the existence of disease to the librarian. The proposal is worthy of careful consideration, and would, if adopted, add a suitable corollary to that useful regulation which forbids an actual sufferer from infectious disease to expose himself in any public place. It will be noticed that it is intended to apply to all public libraries, whether free or not, and any action on the part of the Board should be

no less extensive. Changes in law, however, are often tardy in development, and it therefore behoves the managers of libraries in the meantime to impress upon their readers by notice and regulation what is their evident duty in this matter.

QUEEN'S HOSPITAL, BIRMINGHAM

THE resignation of Sir James Sawyer as senior physician to the Queen's Hospital will cause some vacancies. It is rumoured that Dr. Foxwell will be a candidate for this appointment, and that Dr. Wilson will apply for the post of assistant physician to the General Hospital in the event of Dr. Foxwell going to the Queen's. Possibly Dr. Crooke may apply for the appointment of casualty physician to the Queen's Hospital, and will be ready for any pathological vacancy which may occur at the College.

A POLICEMAN in St. Louis having been shot in the abdomen while making an arrest, Dr. Bernays, the surgeon who attended him, at once performed laparotomy, and sutured the stomach and jejunum, which were injured. The man recovered, and the municipality of St. Louis has granted a sum of $500 to Dr. Bernays for his skilful management of the case. Such a graceful act deserves to be recorded, and commended as a precedent.

THE *Times and Register* (New York and Philadelphia, May 11th) states that among the names mentioned for the vacancy created by the death of Professor S. W. Gross are those of Charles Parks of Chicago, C. Wyman of Detroit, Hunter Maguire of Richmond, and Nicholas Senn of Milwaukee.

THE Cavendish Lecture will be delivered by Dr. Andrew at the West London Hospital on Friday, June 7th, at 5.30 P.M. The subject will be "The Relations between Disease and the Regulating Nerve Centres."

MR. PROVAND has given notice to call attention to the financial position of the London and other hospitals, and to move a resolution on the subject.

SIR MORELL MACKENZIE has been elected an Honorary Member of the Medical Society of the State of New York.

DR. GRAILY HEWITT has been elected a Fellow of the Royal Society of Edinburgh.

VACCINATION IN JAPAN.

BY HAMILTON CARTWRIGHT, M.R.C.S. &c.,
EMERITUS PROFESSOR AND HON. FELLOW OF KING'S COLLEGE, LONDON.

IN the face of so many conflicting testimonies and opinions as to the value of vaccination, from Dr. Creighton's contribution to the "Encyclopædia Britannica" to the recent article in the *Westminster Review* for February, it may be instructive to those who are interested in the subject to recount the information which I gained in Japan during a voyage round the world, whence I have just returned. There could be no better test country as to the value of vaccination than Japan, and having visited it twice within the last twenty years I am enabled to give some personal testimony as to what the effect of vaccination has been there. Two decades since, nearly every second person was pock-marked; whilst now, as a rule, this is only the case with the old, the younger children in those districts where vaccination is skilfully performed being unmarked. Whilst at Tokio, I visited the native hospitals, under the ægis of Mr. Yamada, the secretary of Dr. Nagayo Sensai, the President of the Sanitary Board of the Home Office, to whom I am much indebted for information on this and other medical matters. My first visit was to the municipal bovine farm under the care of Dr. Kijuchi, and maintained at the expense of the State. After seeing a calf skilfully vaccinated by the doctor, he operated upon several patients, and I was surprised to see that he vaccinated all who came to him, though some had well-marked cicatrices on both arms of very recent date. He told me that he never refused to revaccinate, however successful a prior operation had been, as the patients' return proved their faith in the operation. In relation to this, he said that he considered it had been amply demonstrated in Japan that vaccination, however perfectly performed, only rendered a person far less liable to small-pox or modified the attack, whilst he thought that it lost much of its protective power after a lapse of five years, though he said that he did not know of a case of death from small-pox in cases in which the operation had been performed within five years and was effective in both arms. In this institution the operation is most carefully carried out, five punctures being made in each arm. In Tokio the people have such belief in the operation that they frequently ask to be revaccinated within the year. In that town, as in Osaca, Kyoto, and Hiogo, great pains are taken to secure the efficacy of the operation; but in other places there are so few qualified practitioners that it is often imperfectly performed. Thanks to Dr. Nagayo Sensai I have been provided with full statistics with regard to small-pox since the legal and compulsory institution of vaccination in the seventh year of Meiji (1874), when the Government instituted a vaccine farm at Tokio for the distribution of calf lymph to the different local authorities throughout the country in spring and autumn, and whenever small-pox is prevalent.

The lymph is preserved in capillary tubes, five boxes of which constitute a "gu," or set. The distribution was formerly 3 "gu," or 15 sets per 100,000, now increased to 6 "gu." In April, 1887, instruction was first given by agents of the Home Department in its use, and the regulations for vaccination, and the penalties for non-compliance with them, enacted in 1874 and 1885, were confirmed. The new regulations oblige not only those unsuccessfully but also those successfully vaccinated to be revaccinated within a period between five and seven years after the first operation, whilst in the event of an epidemic of the disease all are recommended to be revaccinated, however recent their last vaccination. The breach of these regulations is punished by fine, or even imprisonment. (See annexed forms of vaccination certificates.) Between

VACCINATION CERTIFICATES.

Form No. 1.

[Seal.] *Certificate of Vaccination.*

Name .....
Sex .....
Residence .....
Age .....

Was vaccinated by me with perfect (or imperfect) result,
..... (Name of Vaccinator).

Form No. 2.

Table showing the number and the results of the vaccinations made during the half-year beginning .... ending .... year of Meiji by ..... (Name of Vaccinator and residence).

.... year of Meiji.	First Vaccinations.		Second Vaccinations.	
	With perfect results.	With imperfect results.	Perfect results.	Imperfect results.
.... Month ..				
.... ,, ..				
.... ,, ..				
.... ,, ..				
.... ,, ..				
Total ..				

July, 1878, and June, 1879, 2496 persons were attacked by the disease, and 685 died, from which figures we have a

TABLE I.

SHOWING CASES OF SMALL-POX BY AGES AND SEXES, ETC., IN EACH FU AND KEN, JULY, 1878—JUNE, 1879.

(Names of Fu and Kens from which no case has been reported are not mentioned in this Table.)

Name of Fu or Ken.	Vaccinated or not.	0—1. M.	0—1. F.	1—3. M.	1—3. F.	3—7. M.	3—7. F.	7—10. M.	7—10. F.	10—15. M.	10—15. F.	15—30. M.	15—30. F.	30— M.	30— F.	Total. M.	Total. F.	Ages and sexes not reported.	Grand total.	Recoveries.	Deaths.	Percentage of deaths.
Tokio Fu	Vaccinated	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	..	..	..
	Not vaccinated	..	..	1	1	..	1	..	..	..	..	..	..	..	..	1	2	..		3	..	
Kioto ,,	Vaccinated	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..
	Not vaccinated	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	..	..		1	..	
Niigata Ken	Vaccinated	..	..	..	..	..	..	..	..	..	1	2	..	..	..	2	1	..	7	3	..	..
	Not vaccinated	..	..	..	..	..	..	..	..	..	1	1	..	..	..	1	1	2		3	1	14·29
Saitama ,,	Vaccinated	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..
	Not vaccinated	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	..		1	..	
Ibaraki ,,	Vaccinated	..	..	1	..	2	2	1	..	1	2	5	3	1	..	11	7	..	62	18	..	..
	Not vaccinated	..	2	3	3	4	4	..	..	4	3	15	6	..	..	26	18	..		44	..	—
Miye ,,	Vaccinated	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..
	Not vaccinated	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	..	..		1	..	
Aichi ,,	Vaccinated	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	..	..	1	1	..	..
	Not vaccinated	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..		..	..	
Shidzuoka ,,	Vaccinated	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..
	Not vaccinated	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..		1	..	
Yamanashi ,,	Vaccinated	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..
	Not vaccinated	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1	..		1	..	
Shiga ,,	Vaccinated	..	..	..	..	..	..	..	..	..	3	..	1	..	..	..	..	..	8	..	..	..
	Not vaccinated	..	..	..	1	..	..	2	1	..	..	..	..	..	..	5	3	..		6	2	25·00
Okayama ,,	Vaccinated	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	8	..	..	..
	Not vaccinated	2	..	..	..	..	..	..	1	1	..	3	..	1	..	7	1	..		5	3	37·50
Yehime ,,	Vaccinated	13	1	2	14	14	14	18	10	27	21	65	41	1	8	140	109	..	487	152	97	..
	Not vaccinated	21	24	41	38	22	21	19	8	8	9	13	9	3	2	127	111	..		80	158	52·36
Kochi ,,	Vaccinated	3	5	8	2	16	11	11	11	19	18	63	31	8	3	128	82	..	360	190	20	..
	Not vaccinated	5	5	6	10	17	13	7	9	17	4	31	17	5	4	88	62	..		100	50	19·44
Total	Vaccinated	16	6	11	16	32	27	30	21	47	42	136	76	10	11	282	199	..	941	364	117	..
	Not vaccinated	29	31	51	54	43	41	27	18	33	17	66	32	10	6	259	199	2		246	214	35·18
Nagasaki Ken	Whether vaccinated or not, unknown	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	404	404	329	75	18·56
Nagano ,,	Ditto	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	25	25	23	2	8·00
Hiroshima ,,	Ditto	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	407	407	256	151	37·10
Wakayama ,,	Ditto	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	9	9	8	1	11·11
Oita ,,	Ditto	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	23	23	17	6	26·09
Kumamoto ,,	Ditto	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	687	687	568	119	17·32
Total	Ditto	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1555	1555	1201	354	22·76
Grand total		45	37	62	70	75	68	57	39	80	59	202	108	20	17	541	398	1557	2496	1811	685	27·44
			82		132		143		96		139		310		37		939					
Comparison as to sex. Plus		8	..	..	8	7	..	18	..	21	..	94	..	3	..	143	..	..	.....			
Percentage of age-period			3·29		5·29		5·73		3·85		5·57		12·42		1·48		..	62·37	.....			

ratio of 27·44 deaths per cent. of all cases. According to the instructions of the eleventh year of Meiji (June, 1878), the authorities were instructed to make inquiries in every case whether the patient had been vaccinated, and, if so, how often, and whether the operations had proved susceptibility or insusceptibility. During this period two "fus," or "kens,"[1] reported small-pox cases as instructed, the number being 941 in all, of which 458 were vaccinated, 481 unvaccinated, as Table I. shows. The patients who had never been vaccinated were most numerous between the ages of one and three; and the deaths of patients who had been vaccinated were 24·32 per cent. of those attacked, and of those unvaccinated 59·17 per cent., giving a higher rate by twofold to the latter. In relation to this statement, it must be recollected how often vaccination is imperfectly performed in Japan by unqualified persons, though statistics prove that effective vaccination does not only in a majority of cases prevent the attack, but lessens the malignant nature of the disease when its absolute virtue has faded away with the lapse of time. The latest report to which I have had access was that which came out for 1881, these reports appearing at intervals of four or five years. From July 1st, 1876, to June 30th, 1877, the total number of vaccinations amounted to 1,659,298, out of which 1,060,585 were successful, and 598,713, or 36·08 per cent., unsuccessful. Of these, 813,199 were vaccinations performed a second and a third time.

Among those vaccinated for the first time, 785,757, or 96·63 per cent., proved to be successful. The ratio of the total number of vaccinated to the whole population (30,565,570), excepting the "fu" of Tokio and the "kens" of Miyo, Kumamoto, and Kagoshima, was found to be 5·43 per cent. During the period mentioned nineteen cows were vaccinated at the *Parc Vaccinogène* at Tokio, and 17,970 tubes were distributed to the authorities of "fus" and "kens" and to public hospitals and colleges. In relation to this report, the facts of which are entirely derived from information most kindly afforded me by the Home Office of Tokio, through Dr. Nagayo Sensai, I would suggest that they are especially valuable as giving proofs of the efficacy of vaccination for these reasons:—Firstly, in England, our opportunities of testing the true value of vaccination are comparatively rare, whereas in Japan small-pox is never absent, an epidemic form prevailing every spring and autumn. Secondly, the Japanese are taking every means of verifying its success or non-success in statistics most carefully compiled, with European aid. The sixteen years of its adoption in Japan seem to prove these points: that bovine lymph is more effective than human lymph; that operations performed with lymph taken from secondary vaccinations is comparatively ineffective. Dr. Kijuchi has a strong opinion that vaccination is not an absolute protection against small-pox, only modifying its course so materially as to render fatal results almost impossible; and this is a point which we have little opportunity of proving in England, save during an epidemic, whereas in Japan there is an opportunity of doing so at any time. Another point proved is that the duration of the protective power of vaccine is not nearly so long as usually believed, and that in a country where small-pox is rife revaccination is necessary at a period varying from five to seven years. Again, in spite of the great success of vaccination in Japan, it must be remembered that the cause of partial unsuccess is to be sought in the fact that the operation is performed empirically in the greater part of that country by unqualified practitioners, who have never had the opportunity of seeing the operation performed. A proof of its success is to be seen by comparing the old and young in the large towns in which vaccination is obligatory and carefully performed. In the one case pock-marks are the rule, in the other the exception; and so great is the belief of the people in its protective power that they cannot have their children vaccinated too often. Whilst, lastly, Dr. Kijuchi told me that in days gone by it might be said that every person had small-pox once, a severe epidemic occurring, on an average, every seven years. In one epidemic, which occurred in the year of Kwangsei, there were 579 deaths out of 1345 cases; whilst at present he said that cases occurring *after efficient vaccination* were very mild, and *over within thirteen days, whilst he knew of no death in such cases.* This is strong testimony, but probably not over-stated by so careful an observer.

Table II. is from a manuscript given to me by Mr. Yamada in preparation for the next forthcoming report.

[1] A "fu" means a capital; a "ken" a department.

TABLE II.

SHOWING THE NUMBER OF VACCINATIONS IN JAPAN FROM 1875 TO 1886.

Year.	Primary.			Secondary and Revaccination.			Grand totals.	Population of empire.	Vaccination per 100 of population.
	Successful.	Failed.	Totals.	Successful.	Failed.	Totals.			
1875*	171,061	8,888	179,949	..	..	115,991	295,940	33,997,415	..
1876	708,452	27,725	832,873	200,882	426,690	629,951	1,462,824	34,338,367	4·26
1877	726,953	41,639	768,592	194,216	391,867	586,083	1,354,675	..	..
1878	874,654	40,998	915,652	199,016	479,737	678,753	1,594,405	..	..
1879	772,160	23,852	796,012	124,898	332,131	457,029	1,253,041	35,768,547	3·50
1880	942,007	33,768	976,675	170,870	480,753	651,623	1,628,298	35,929,023	4·53
1881	945,055	52,681	997,736	183,260	280,174	463,434	1,461,170	36,358,955	4·02
1882	1,007,815	49,158	1,056,973	183,554	259,483	443,037	1,500,010	36,700,079	4·09
1883	1,238,111	57,874	1,295,985	238,223	358,079	596,302	1,892,287	37,017,262	5·11
1884	1,180,803	54,067	1,224,870	298,128	338,590	636,718	1,871,588	37,451,727	5·00
1885	1,595,556	142,396	1,737,952	1,014,346	1,453,438	2,587,485	4,325,437	37,868,949	11·42
1886	1,304,380	165,638	1,470,018	1,949,749	2,422,680	4,372,429	5,842,447	38,151,217	15·31

* Latter half.

THE PARIS UNIVERSAL EXHIBITION.

(FROM OUR SPECIAL CORRESPONDENT.)

The Eiffel Tower.

AFTER a fortnight's delay the Eiffel Tower has been opened to the public. This is certainly the most important item of Exhibition news. It is true that the public as yet is only allowed to go up to the second platform, where the *Figaro* has established the printing-office of its Eiffel Tower number. Still, to write, print, and publish a newspaper in an office thirty-six storeys high is certainly a new departure in journalism, which, if prolonged for a certain time, might produce physical results upon the staff worth noting. Will such unnatural exercise as that of ascending several times in the course of the day thirty-six flights of stairs numbering 730 steps conduce to the health of the staff and the compositors? But then the lift is soon to be in working order, and it will no longer be necessary to climb. The air is much purer at this altitude, and most persons who have gone up the tower declare they feel as if they had been at the seaside. If this impression gains ground, perhaps the construction of

BEST COPY AVAILABLE

four Eiffel Towers will be suggested, so as to form the four legs of a huge platform, where, in the midst of one of our most crowded cities, a sanatorium might be built right away from the smoke, the noise, the dust, and the foul atmosphere of the town. Such a health resort may be created above, as well as outside towns and cities, by some Semiramis of the future. In the meanwhile, and pending the construction of this castle in the air, measures have already been taken to utilise the tower for meteorological observations and physical researches. Nor is this the first time that the science of M. Eiffel has been useful to meteorologists; the great dome of M. Bischoffsheim's observatory at Nice was built by M. Eiffel. For the construction of his tower 500 engineer's designs and 2500 pattern-maker's drawings were necessary. In the tracings, an error of the tenth of a millimetre in selecting the spot to pierce for the introduction of a rivet would be considered by M. Eiffel a serious matter, and yet it is stated that 7,000,000 such holes had to be pierced and 2,500,000 rivets employed. It has also been calculated (and this shows how light is the tower) that whereas M. Eiffel himself, when sitting in his armchair before his desk, exercised a pressure on the floor of his office equal to four kilogrammes per square centimetre, the tower, though it is 298.30 metres taller than M. Eiffel, weighs upon the earth only two kilogrammes per square centimetre. The monument is also very cheap, for the tower cost only one franc per kilogramme—that is, a fraction more than fivepence per pound weight. These statistics are not merely curious and amusing; they open out great possibilities for the future, indicate mighty changes in the building arts, and with these the health, comfort, and prosperity of populations are intimately concerned.

The Exhibition has most emphatically established the superiority of iron over wood and stone. As M. Aurélien Scholl puts it in his admirable "chronique" published by the *Matin*: "The engineer is the king of the present, and to him the future belongs. Iron and porcelain will soon take the place of wood and stone. You will see arising in Paris incombustible houses due to the collaboration of the iron master and the potter; Creusot will supply the framework, Creil and Limoges the walls, Sèvres the frontispieces and frescoes." More than this, it must be recognised that iron buildings, so far considered useful but ugly, have, by this combination of the potter's art with ironwork, been rendered very artistic. From a health point of view, this great change in the methods of building may also have advantages. Iron is not absorbent. An iron rafter is less likely to become impregnated with the germs of disease. The same may be said of enamelled hardware or pottery, and it is, of course, much easier to wash such walls and exposed surfaces than if these were made of laths and plaster, stone, or brick. The evolution, therefore, which is taking place in the methods of building and which is so clearly demonstrated at the Exhibition, may be already considered as likely to improve the health of the future generations who will more fully benefit by these changes. Of course, there will be some corresponding disadvantages. Iron more readily conducts heat and cold, also the glazed hardware will render the walls less porous. It will probably entirely stop that circulation of air which takes place through the walls, and contributes, more than is generally understood, to change the air within inhabited dwellings. Under these circumstances better, more constant and automatic means of ventilation must be provided in the houses of the future.

Again, the construction of very high buildings in iron involves a labour question of great importance. The exposure of the men who rivet together the iron framework involves serious risks. Where there are thick walls built up gradually the workmen are not so subject to vertigo, and they are also better sheltered from the wind. Nothing has been said concerning the accidents and the loss of life at the Exhibition, and especially at the Eiffel Tower; but it would be a mistake to conclude from this silence that there have been no casualties. I know as a matter of fact that some very terrible accidents have occurred; but with so excitable and sentimental a people as the French, it was felt that it was the best policy not to cast a shade over the success and the pleasures of the Exhibition by the record of the suffering endured by these martyrs of labour. We shall therefore not know the exact facts till the close of the season. At first, there were about 250 workmen engaged in building the tower, but as the work became more and more difficult their number decreased, till at last only about twenty remained to complete the task. What these men suffered may be judged from the fact that at times they had to work in a temperature of 17° F. On other occasions the wind travelled at the rate of eleven metres (thirty-six feet) per second. It is not surprising that accidents occurred, that strikes took place, and that when the work, in spite of these difficulties and dangers, was accomplished, the Paris Municipal Council voted out of its funds a gratuity of a thousand francs to be divided among these brave and successful workmen. Evidently structures of this description involve risks which may call for special legislation to meet such altered conditions of labour.

However this may be, the great object—that of rendering the Exhibition popular and attractive—has been triumphantly attained. On the first Sunday there was a greater attendance than on the opening day, and last Sunday the crowd was still larger. There were no less than 234,727 tickets taken at the doors. During the first fourteen days there have been altogether 1,335,348 tickets, which make a daily average of 95,382. On Sunday last the number of accidents was greater than on previous occasions, but still very trifling considering the circumstances. The number of visitors to the Universal Exhibition of 1867, when the Empire reached its zenith and almost all the crowned heads came to Paris, was for the whole season 9,062,965. It will be seen how far this record will be left behind. In 1878 there were 16,062,965 visitors, and during that year the five great railway lines brought to Paris 12,154,905 travellers, showing an increase on the previous year, when there was no Exhibition, of 2,662,491 travellers. From May 1st to Oct. 31st, 1878, 571,792 persons took furnished rooms in Paris. Of this number 353,170 were French and 218,622 were foreigners. This showed an increase of 109,832 on the record of the previous year—an increase due, in all probability, to the Exhibition. If the concourse of people this year is double that of 1878—and, by comparing the figures of 1878 with those of 1867, we may safely conclude that this will be the case—then the furnished hotels and lodging-houses of Paris will require at least 200,000 more beds than they used during the six summer months of last year. With these figures it is easy to realise how important becomes the whole question of domestic hygiene, of the superintendence of hotels, disinfection after disease, and general sanitary precautions. These problems I have already discussed in my previous letters, but the above figures will further show their importance.

With so great an increase of population, it is natural to expect that medical practice will be increased, and on this point the profession has already manifested some alarm. Fears are entertained that unqualified practitioners and quacks may profit by the great influx of ignorant strangers to reap a golden harvest. A certain number of doctors have consequently petitioned the authorities to issue a police decree calling upon all qualified practitioners to register their names at the nearest police station. This proposition, however, does not find much favour. There are very few persons who will give themselves the trouble to call at the local police station to inquire whether the doctor they thought of consulting possesses proper qualifications. As matters now stand, the Law of the 19th Ventose, Year XI., imposes a similar formality on all medical men. All doctors must, within a month after taking a new residence, notify the fact to the local police authorities. A list is drawn up every year of the medical practitioners who thus register themselves, and is sent to the Ministry of Justice. The object of this rule is to supply all citizens with official means of verifying the diplomas and qualifications of all practitioners. The real difficulty arises from the thoughtlessness, ignorance, or indifference of the patient, who too often fails to give himself the necessary trouble to make any inquiries whatsoever, or who too readily listens to the absurd and impossible promises of some quack. These quacks exist in Paris as elsewhere, and some are even able to obtain the services of unscrupulous but fully qualified practitioners. After all, as I at first remarked, the success of quacks is based on the foolishness of the public.

Paris, May 21st.

HOSPITAL SATURDAY AND SUNDAY IN SOUTH AFRICA.—The Hospital Saturday and Sunday collections and subscription lists in Kimberley and Beaconsfield brought in £1000.

ROYAL COLLEGE OF PHYSICIANS.

AN extraordinary Comitia of the College was held on the 20th inst., Sir Andrew Clark, Bart., President of the College, in the chair. Several gentlemen whose names have been already published were admitted to the Fellowship.

The terms of the Report of the Royal Commission upon the Higher Education in London were brought to the notice of the College by the President, who stated that, although the Report was not yet printed, it was well known that the Commission was unanimous in advising the rejection of the petition of the Royal Colleges of Physicians and Surgeons to be given powers to grant degrees in Medicine. On the motion of Dr. Allchin, seconded by Sir Risdon Bennett, a small committee was nominated to inquire into the position of the College with regard to the question, and to invite the co-operation of the Royal College of Surgeons in considering what further steps should be taken by the Colleges in view of the report of the Commission. The committee nominated by the President consisted of Sir Risdon Bennett, Dr. Andrew, Dr. Pye-Smith, Dr. Allchin, and Dr. D. Macalister.

A communication was read from the Charity Organisation Society inviting the co-operation of the College in furthering the proposal for an inquiry into the hospitals and charities of the metropolis. The Registrar was directed to acknowledge the receipt of the communication; but the College reserved its right of taking, if it thought fit, independent action in the matter.

A report was read of the Committee appointed to consider the question of Quarantine, which will be forwarded to the Colonial Office, after which it will be published.

The Registrar moved, for the second time, an alteration in Bye-law LXXI., constituting a Library Committee.

THE GROSVENOR GALLERY.

THE exodus from the Grosvenor Gallery has passed into history, and although last year every exertion was made to minimise the loss of the malcontents, yet it must be admitted that the defection and the strain have told on this year's exhibition. Certainly, the Gallery had contrived, chiefly by the aid of Mr. Burne Jones, to retain a distinctive flavour, whereas now there is little or nothing to distinguish the rooms from so many apartments in Burlington House. The change is, perhaps, most clearly marked by the fact that some of the greatest successes are achieved by older members of the Royal Academy. Sir John Millais has always been a staunch friend of Sir Coutts Lindsay, but he has shown few works of greater grace and charm than "Shelling Peas," though some of its predecessors may have been stronger and better finished. Mr. Breton Rivière's "Prometheus Bound" is not unworthy of the associations of his "Rizpah," which it recalls; and in the pictures of Messrs. Pettie and Sant we have some of the best, if not of the most ambitious, which they have to offer us. Mr. J. C. Hook is as good as ever in his sea shores, and if anything be lacking to the older Academician, it is fully supplied in the more open sea of his younger rival, Mr. Henry Moore. In portraiture Mr. J. J. Shannon now holds incontestably the post of chief painter to the ladies, and, many as are the charms which he has to portray, he has fallen neither into back work, nor, on the other hand, into such exaggerated cleverness as is seen in Mr. Skipworth's "Magpie," near the entrance. There is a noteworthy portrait by Mr. C. H. Shannon, a more interesting if less complete painter; and Mr. Logsdail's strong picture of the War Correspondent, Mr. F. Villiers, and Mr. Bigland's sound work of "Mrs. George Rhodes" must not be passed over. Variety, which does not necessarily imply originality, has always been a feature of English art, but the works of the newer men are remarkable rather for a close application to nature than for any large ambition of aim. The two most remarkable landscapes are perhaps those of Mr. Lindner (28) and a Cornish work of Mr. Llewellyn; but much of the best work is to be found in scraps of studies in the fourth gallery. Mr. Clausen has attempted a larger picture than usual in "Ploughing," and, if he has not met with his full reward, it must be due to a certain want of life in what is otherwise an admirable work.

Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

Stratford-on-Avon Combined Districts.—The combination for which Mr. G. H. Fosbroke acts as medical officer of health includes portions of the counties of Warwick, Worcester, and Gloucester, and it has for many years exhibited considerable advance in sanitary progress. Looking at the zymotic rate of death as a test of progress, Mr. Fosbroke is able to show how substantial the advance has been. In 1875, 1877, and 1879 the rate was 2·0 or more per 1000; then a fall set in, and for the last four years it has only averaged a little over 0·7, the rate for 1888 being only 0·5. This result is alleged to have been unquestionably brought about by the numerous and extensive sanitary improvements carried out, amongst which we would recall the successful administration in connexion with the isolation of infectious diseases which Mr. Fosbroke initiated during the early years of his office. Although only four deaths were registered as due to diphtheria in the five sanitary districts included in the combination, yet it is evident that the obscurity in which the causation of this disease is involved remains a source of anxiety. In this district it still clings essentially to the rural areas, it appears to show some power of progressive development from sore throats of a non-specific sort, and it is not materially complicated by the addition of any noteworthy number of deaths from croup of the non-spasmodic type. The voluntary system of notification of infectious diseases inaugurated many years ago is maintained with success, one leading principle of it being that Mr. Fosbroke accepts the assurance of the medical men in his district that every case will be reported, and if they inform him that all needed precautions are taken, no need for his intervention is regarded as called for.

Newcastle-upon-Tyne Urban District.—Mr. Henry Armstrong has the satisfaction of reporting for 1888 the lowest mortality on record for the city of Newcastle—namely, one of 20·5 per 1000 living; and he adds that the deaths from zymotic diseases are only two-fifths of the number during the previous year, almost all the specific fevers having diminished, except diphtheria, as to which there was a slight increase. And, further, the infant mortality of the city is more than 22 per cent. below that of the previous year, and has never before been so low; and in this connexion it is noteworthy that there has been a great diminution in the number of uncertified deaths which occur so largely amongst infants. As to infectious diseases, which are notified under a local Act, the number of cases was 43 per cent. below that for the previous year, and 48 per cent. below the average for the previous five years. Amongst the points calling for amendment in the future, there is evidently some need for a modification of defective bye-laws as to new buildings, and especially as to the construction of bedrooms without some efficient means of ventilation, and also as to attics. Where bedrooms are not provided with fireplaces, they are required, under all modern bye-laws, to have some other permanent and adequate means of ventilation, and this should be seen to as regards Newcastle. Mr. Armstrong's report contains two special ones. One relates to a peculiar epidemic of scarlet fever, in which a dairy-supply came under suspicion, and it is one on which we have already commented. The other is descriptive of the new isolation hospital erected for the purposes of Newcastle. The completion of this excellent piece of work is highly creditable to the sanitary administration of the borough, and it affords a further indication of the value which is locally set on the services of Mr. Armstrong in the prevention of the spread of infectious diseases. With much less efficient means than will now be at his disposal Mr. Armstrong has laboured most successfully in this direction both in the town and the port, and the series of annual reports which he has issued afford a lasting testimony to the great saving of life and improvement in health which have resulted from the measures of progress inaugurated during his tenure of office.

Glanford Brigg Rural District.—The general mortality for this district as a whole was 14·9 per 1000 last year, and probably 17 per 1000 if the Ironstone villages alone are con-

sidered. The general rate has now been steadily diminishing since 1883, when it stood at 19 per 1000, and Mr. J. B. Moxon is convinced that this is largely due to the effect of the sanitary improvements which have been carried out. Certain occurrences of infectious disease have taken place during the year, but they were by no means numerous, and where such diseases were detected measures of precaution were adopted. Among the localities where improvements have been effected Ashby is referred to. Here, in connexion with a damp subsoil, pulmonary phthisis was frequent; a few years ago the place was sewered, with the result of a very substantial saving of life from all causes, and notably from phthisis. And in the Ironstone villages generally there have been draining, metalling of streets, ventilation of sewers, and imposition of efficient bye-laws as to buildings; and the result is better health and longer lives for the inhabitants. Mr. Moxon's story is one which shows the value of a well-considered expenditure in sanitary improvements.

Blackpool Urban District.—Blackpool had last year the most favourable death-rate on its record—namely, one of 15·6 per 1000. Whilst, however, there was some considerable reduction in the amount of death from a number of the infectious and zymotic diseases, there was some increase as regards enteric fever, and also a considerable increase of diphtheria, no less than 13 deaths being due to the latter disease. Diphtheria had towards the close of 1887 been somewhat prevalent in Great Layton; then it extended, and it was probably rendered continuous by a succession of cases of so-called "patchy" throat which were evidently infectious, and in certain instances had "gone through the house." On the whole, diphtheria has shown a tendency during the last few years to increase in Blackpool, and we note during 1888 that, in addition to the 13 deaths referred to, there were 4 from non-spasmodic croup. Systematic improvement of dwellings has been maintained, the work being based on the results of a house-to-house inspection; more stringency is manifested in the supervision of new buildings; a number of sewers have been relaid, and especial attention has been given to the question of sewer ventilation; whilst plans have been prepared for a new hospital for infectious diseases. Dr. Henry Welch reports that the compulsory notification of infectious diseases continues to work smoothly, but notification on the part of householders is, as is commonly the case under the dual system, merely nominal. The isolation hospital has also done excellent service.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

In twenty-eight of the largest English towns 6051 births and 3144 deaths were registered during the week ending May 18th. The annual rate of mortality in these towns, which had declined in the preceding six weeks from 20·3 to 18·8 per 1000, further fell last week to 17·2, and was lower than in any previous week of this year. During the first seven weeks of the current quarter the death-rate in these towns averaged 19·2 per 1000, and was 2·4 below the mean rate in the corresponding periods of the ten years 1879-88. The lowest rates in these towns last week were 11·0 in Norwich, 11·1 in Leicester, and 14·8 in London, in Portsmouth, and in Birkenhead. The rates in the other towns ranged upwards to 25·7 in Oldham and in Halifax, 28·2 in Manchester, and 38·1 in Preston. The deaths referred to the principal zymotic diseases in these towns, which had been 461, 428, and 414 in the preceding three weeks, further declined last week to 382; they included 138 from measles, 100 from whooping-cough, 45 from diarrhœa, 37 from diphtheria, 35 from scarlet fever, 26 from "fever" (principally enteric), and only one from small-pox. No death from any of these zymotic diseases was recorded during the week in Brighton, while they caused the highest death-rates in Sheffield, Hull, and Preston. The greatest mortality from measles occurred in Leeds, Sheffield, Bristol, Bolton, Halifax, Manchester, Hull, and Preston; from whooping-cough in Cardiff, Oldham, and Preston; and from scarlet fever in Salford, Plymouth, and Sheffield. The mortality from "fever" showed no noticeable excess in any of the twenty-eight towns. Of the 37 deaths from diphtheria in these towns, 24 occurred in London, 4 in Salford, 2 in Birmingham, 2 in Leeds, and 2 in Newcastle-upon-Tyne. Small-pox caused 1 death in Bristol, but not one in any other of the twenty-eight great towns; and no small-pox patient was under treatment at the end of the week either in the Metropolitan Asylum Hospitals or in the Highgate Small-pox Hospital. The number of scarlet-fever patients in the Metropolitan Asylum and London Fever Hospitals at the end of last week was 610, against 581, 617, and 610 on the preceding three Saturdays; 65 cases were admitted to these hospitals during the week, against 70 and 58 in the previous two weeks. The deaths referred to diseases of the respiratory organs in London, which had been 305, 242, and 213 in the preceding three weeks, were last week 217, and were 99 below the corrected average. The causes of 52, or 1·6 per cent., of the deaths in the twenty-eight towns last week were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Leeds, Bradford, Sunderland, and in nine other smaller towns. The largest proportions of uncertified deaths were registered in Halifax, Oldham, and Preston.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been 22·3 and 21·2 per 1000 in the preceding two weeks, was 21·5 in the week ending May 18th; this rate exceeded by 4·3 the mean rate during the same period in the twenty-eight large English towns. The rates in these Scotch towns ranged last week from 15·9 and 17·0 in Greenock and Leith, to 24·9 in Glasgow and 26·5 in Aberdeen. The 550 deaths in the eight towns showed an increase of 9 upon the number in the previous week, and included 37 which were referred to whooping-cough, 24 to measles, 15 to diarrhœa, 8 to diphtheria, 6 to scarlet fever, 4 to "fever" (probably enteric), and not one to small-pox; in all, 94 deaths resulted from these principal zymotic diseases, against 108, 104, and 77 in the preceding three weeks. These 94 deaths were equal to an annual rate of 3·7 per 1000, which exceeded by 1·4 the mean rate from the same diseases in the twenty-eight English towns. The fatal cases of whooping-cough, which had been 47 and 36 in the preceding two weeks, were last week 37, of which 23 occurred in Glasgow, 5 in Edinburgh, and 5 in Dundee. The deaths from measles, which had been 43, 33, and 22 in the previous three weeks, rose again last week to 24, and included 15 in Glasgow and 8 in Aberdeen. The 15 deaths attributed to diarrhœa showed a considerable increase upon the number in the previous week, and were 5 above the number returned in the corresponding week of last year; they included 10 in Glasgow. The 8 fatal cases of diphtheria showed an increase upon recent weekly numbers; 3 were returned in Glasgow, 2 in Edinburgh, and 2 in Dundee. Four of the six deaths from scarlet fever and 3 of the 4 from "fever" occurred in Glasgow. The deaths referred to the principal diseases of the respiratory organs, which had been 110 and 86 in the preceding two weeks, rose again last week to 94, but were 6 below the number in the corresponding week of last year. The causes of 57, or more than 10 per cent., of the deaths registered in the eight towns during the week were not certified.

HEALTH OF DUBLIN.

The death-rate in Dublin, which had been 28·2, 26·2, and 27·3 per 1000 in the preceding three weeks, declined to 25·1 in the week ending May 18th. During the first seven weeks of the current quarter the death-rate in the city averaged 25·9 per 1000, the mean rate during the same period being only 16·9 in London and in Edinburgh. The 170 deaths in Dublin showed a decline of 15 from the number in the previous week, and included 5 which were referred to "fever," 4 to whooping-cough, 2 to measles, 1 to scarlet fever, 1 to diarrhœa, and not one either to small-pox or diphtheria. Thus the deaths from these principal zymotic diseases, which had been 13, 11, and 9 in the preceding three weeks, rose again last week to 13; they were equal to an annual rate of 1·9 per 1000, the rates from the same diseases being 1·7 in London and 1·8 in Edinburgh. The fatal cases of "fever," measles, and whooping-cough exceeded the numbers returned in the previous week. The deaths both of infants and of elderly persons were also fewer than those returned in the previous week. Four inquest cases and six deaths from violence were registered; and 43, or more than a quarter, of the deaths occurred in public institutions. The causes of 23, or nearly 14 per cent., of the deaths in the city were not certified.

Correspondence.

"Audi alteram partem."

REFORM OF THE ROYAL COLLEGE OF SURGEONS.

To the Editors of THE LANCET.

SIRS,—In your issue of May 11th you publish a leading article on the present agitation among Members of the Royal College of Surgeons, and also a letter from Mr. Tweedy to me in answer to a circular recently sent to the Fellows. Many of the statements made in these two contributions are so open to argument that I trust you will allow me to make some comment on them.

The opening paragraph of the leading article in question is to the effect that "Members have been deprived of their commonalty rights." By a reference to the Charters granted from time to time, it will be seen that this is far from being the case. No electoral privileges have ever been withdrawn from the Members. On the other hand, the basis of elections to the Council and Court of Examiners has been broadened, for at one time these bodies were self-elected, but by the Charter of 1843 this power was withdrawn from the Council and vested in the Fellows. The Company of Barbers was incorporated by an Act of Edward IV., and its government, and that of surgeons practising in London, entrusted to two Masters or Governors, the two most expert in the mystery of surgery. By an Act of Henry VIII. the Company of Barbers and that of Surgeons were united under the title of the Barber-Surgeons. It was to this corporation that the Charter of Charles I. was granted, and which continued to exist as a single corporation until, in 1745, the Barbers and Surgeons were separated by Act of Parliament into two distinct companies. By this Act those who were Freemen of the conjoint Barber-Surgeons' Company, and were admitted approved surgeons within the rules of the said Company, were formed into a separate body known as the "Master, Governors, and Commonalty of the Art and Science of Surgeons of London." The Freemen of the new Company of Surgeons of 1745 possibly had some privileges in the election of the governing body of their Company, but we are not acquainted with any record of their having exercised such right. Furthermore, it must not be forgotten that the Company of Barber-Surgeons and the Company of Surgeons were empowered to examine those who desired to practise surgery in London, and they did so examine and control such persons who were Licentiates, not Freemen, of the Company, and had no share in its privileges. This fact is a difficulty in the way of those who maintain that the present Members are lineal successors of the ancient Freemen. It is more reasonable to look on them as successors to the Licentiates or Foreigners. But further still, in 1796, the Company of Surgeons of London came to an end, and for four years there was no legal association of surgeons, until, in 1880, a Charter was granted constituting out of the fragments of the dissolved company a totally new body—the College of Surgeons. In the construction of this body the functions and rights of the several constituents of the College were clearly defined. The Charter incorporating the College was granted by George III. The Master, Governors, and Court of Assistants who formed the first governing body were nominated and appointed by the Crown, and the Charter directed that all subsequent vacancies in the governing body should be filled up by the Master, Governors, and Court of Assistants, who were to select them from among the Members. It is clear, then, that the Members had no voice whatever in the election of the governing body, which was, after the first appointment by the Crown, self-elected. The appointments, too, were held for life, and the examiners were chosen only from among members of the governing body (the present Council). Should a vacancy occur in the Court of Examiners, it was enacted that the appointment be filled up by the election to it of one of the governing body. By a Charter of George IV., the titles of Master, Governors, and Court of Assistants were changed for those of President, Vice-Presidents, and Council, but no important changes were made in the constitution of the College.

By the Charter of Victoria, 1843, a new class of Members to be called Fellows was created. The number of Members of Council was increased from twenty-one to twenty-four, and the tenure of office was limited, instead of being for life as heretofore. Members of Council could only be elected from and by the Fellows; the Charter expressly states that no Member who is not a Fellow should be eligible for a seat on the Council. Such provisions certainly deprived Members (not being Fellows) of the possibility of being selected to sit on the Council, but at the same time it also deprived the Council of much power which it had previously enjoyed. But the only Members who had any right to complain of this advantage being taken away from them are those (if there be any now) who were Members before the 1843 Charter was granted. Any Members who have come in since 1843 have never had any greater rights than they possess now; and, moreover, it must not be forgotten that every Member on his admission is carefully informed of the extent of his rights and privileges, among which a share in the government of the College has no place. In justice to the Council and general body of Fellows, it should also be remembered that in 1887 the Council asked for power by the new Charter to elect annually any number of Members, not exceeding twenty, to be Fellows; in other words, to elevate certain Members of professional distinction to that position which would enable them to enjoy the franchise and sit on the Council. But objection was taken to this by the Association of Members, and consequently the Privy Council refused to include the power in the new Charter. In the face of the actual facts of the case, it cannot be shown on legal grounds that the Members ever had any more rights in the College than they now possess.

But setting aside altogether the historical and legal aspect of the case, it is for one and all of us to consider carefully whether an extension of the franchise and increasing the powers of the large body of Members would be beneficial or harmful to the interests of the College, for I would submit that this is really the only truly patriotic way to view the matter. I am of opinion that an adoption of the present Draft Bill would be fraught with great danger to the best interests of surgery and the College. Macaulay remarks: "It has truly been said that every large collection of human beings, however well educated, has a strong tendency to become a mob; and a country (and the same would apply to an institution) of which the supreme executive council is a mob is surely in a perilous situation." The present Draft Bill would practically make the whole mass of Members the governing body of the College, as will be seen by a reference to Clause 3.

In answer to Mr. Tweedy's letter, I may say that I am at a loss to understand how he can construe the circular recently sent to the Fellows in such a way as to assume that "you and your colleagues seem to approve the action taken by the Committee of the Association of Fellows to ensure that the Bill to be introduced to Parliament shall be in harmony with the resolution passed.....to the effect that Members of the College of ten years' standing shall be empowered to take part in the election of the Council, and that Members of twenty years' standing shall be eligible to sit on the Council," &c. There is no ground whatever for such an inference, and I for one of the signatories most cordially disapprove of the resolution in question. The gist of the four questions in the circular is to elicit the opinion of those to whom it is addressed, not to suggest any for their adoption. Mr. Tweedy also objects that the questions submitted to the consideration of the Fellows were based upon the first Draft Bill, and that they do not bear upon the clauses in the second Bill. Comparison of the two Bills will show that the aims and objects of the first draft and of the second are almost identical. Clauses 1 and 2 of the second draft provide that all Members of ten years' standing can exercise the franchise, but Members who are under this standing *may*, unless they are also Fellows, be disqualified. Members may also hold any office in the College. Now these two clauses would give to Members of ten years' standing, and possibly to others, a privilege at present enjoyed by Fellows only; therefore the first question of the circular which suggests that Fellows would lose all privileges they now hold distinct from those of the Members applies as much to the second as to the first Bill. Question 2 states that Members could control the expenditure of the College funds. Clause 3 of the present Bill especially confers this power, as well as others of equal moment. Question 3 refers to the election of President and Councillors from among Members of twenty years' standing. Clauses 3 and 5 bear upon this, for by Clause 3 the Members have the power of directing the Council and of amending

the bye-laws, and in Clause 5 it is especially stated that the Council may admit Members as Councillors. Nor is there in the Draft Bill any clause which forbids Members from enjoying the privileges of the Councillors, among which is the election of the President. The question (4th) relating to Examiners not being elected from Councillors (originally the only persons eligible for examinerships) is certainly modified in the present Bill, but in the latter part of the 5th clause the question of the election of Examiners is touched upon in a way the real drift of which it is not difficult to see.

I enclose for publication the circular recently sent to the Fellows, and also an analysis of the answers returned, which shows that the Fellows generally are not desirous to share their rights with the Members, who, it must be remembered, may all attain to the Fellowship if they will.

At the next election of members of Council the votes will be given by proxy and in person. Let us hope that every Fellow will express by the vote he records his opinion whether the government of the College should be maintained in the hands of the Fellows or handed over to the body of Members at large. The responses to the circular enclosed pretty clearly indicate the predominant opinion of the Fellows.

I am, Sirs, yours truly,

Welbeck-street, May 20th, 1889. C. STONHAM.

[CIRCULAR.]

The Proposed Alterations in the Government of the Royal College of Surgeons of England.

London, April 15th, 1889.

DEAR SIR,—In view of the present agitation by representatives of the Association of Members of the Royal College of Surgeons of England to obtain an Act of Parliament, the object of which is to make radical changes in the Constitution of our College, we shall be glad if you will favour us with your opinion on the following more important changes which would take effect if the Bill (the draft of which is published in the *British Medical Journal*, March 9th, 1889) became law.

1. Fellows would lose all privileges (except the title of Fellow) they now hold distinct from those of the Members. (*Vide* Sections 5, 16, 17, 26, &c).
2. A meeting of Members could control the expenditure of the College funds. (*Vide* Sections 8 and 9.)
3. The Members could elect any Member of twenty years' standing to be President or Councillor. (*Vide* Section 3.)
4. No member of the Council would be eligible for an examinership. (*Vide* Section 40.)

Will you kindly write the word "Approve" or "Disapprove," as the case may be, against each of the four paragraphs, and return the paper as addressed at your earliest convenience. We shall also be glad to receive any remarks you may have to make with regard to the proposed Bill.

We are, Sir, your obedient servants,

MARCUS BECK, EDWARD BELLAMY, W. WATSON CHEYNE, F. LE GROS CLARK, H. H. CLUTTON, N. DAVIES-COLLEY, GEORGE COWELL, CLINTON T. DENT, JOHN ERIC ERICHSEN, C. H. GOLDING-BIRD, A. PEARCE GOULD, HOWARD MARSH, J. MCCARTHY, HENRY MORRIS, HERBERT W. PAGE, A. J. PEPPER, BERNARD PITTS, WILLIAM ROSE, CHARLES STONHAM, FREDERICK TREVES, W. W. WAGSTAFFE.

Analysis of Answers to the Questions set forth in the Circular.

Total number sent out, 925.

Returned filled up	466
,, through the post	27
,, unanswered for various reasons	18
Total returned	511

	Disapprove.	Approve.	Qualified answer.	Unanswered.	Total.
1. Fellows would lose all privileges (except the title of Fellow) they now hold distinct from those of the Members. (*Vide* Sections 5, 16, 17, 26, &c.)	436	18	5	7	466
2. A meeting of Members could control the expenditure of the College Funds. (*Vide* Sections 8 and 9	404	44	8	10	466
3. The Members could elect any Member of twenty years' standing to be President or Councillor. (*Vide* Section 3.)	407	38	15	6	466
4. No member of the Council would be eligible for an examinership. (*Vide* Section 40.)	306	65	15	20	466

DISPOSAL OF METROPOLITAN SEWAGE.

To the Editors of THE LANCET.

SIRS,—Strange as it may appear, in the controversy which has been carried on in your columns on this subject, no allusion has been made to the necessity of adopting some system of interception of the excreta (the solid portion) of urban populations *at the fountain-head*, this being the *only* means of preventing the drains and sewers, especially the former, being converted into underground cesspools. To effect this, it is absolutely necessary that separation of the *liquid* and *solid* excreta should take place at the *starting-point*, the latter being retained in sealed receptacles, while the former is allowed to flow away in pipes placed inside the main sewers; but in all cases the liquid excreta sewage must be kept quite separate and distinct from the rainfall sewage. It is idle to talk of the separation and precipitation of the solid excreta at the outfall under the *present* system, since it is not there to separate; and if Dr. Corfield and Dr. Dupré, both men of great eminence, would make, as I have made, a tour of inspection of the sewers, and take especial note of the sewers' storm *outlets*, through which about 90 per cent. of the *solid* excreta escapes during the rainfall and finds its way into the rivers, without reaching the sewers' outfall at all, they will find, with the present system, that precipitation or disinfection by any chemical process whatever is an impossibility. Surely we cannot cook our hare without first catching it, and *that* neither the Metropolitan Board nor any other board has yet accomplished. We are constantly being told about the purity of the effluent; but this only proves the truth of my statement, that the *solid* excreta escape *through the storm outlets during the rainfall*; the amount that does reach the outfall may be 10 or possibly 15 per cent., but the frightful injury that is done to the health of the residents in the metropolis during the time the solid excreta is flowing or meandering, as it were, in such enormous masses to the storm outlets and the outfall under the streets and houses of London is sad to think of; and if it were possible to make an underground section horizontally of the great city and lift up the upper section, it would at once be seen what a fearful amount of filth Londoners are living over and in the midst of. Does anyone suppose that the excreta of four million people could by any possible process be conveyed to the outfalls or even to the storm outlets without giving off an immense amount of sulphuretted and phosphoretted hydrogen, ammoniacal, and other foul gases, which by contaminating the atmosphere of London must render it altogether unsuitable and unfit to support the lives of such an enormous number of inhabitants? The latter portions of the sewage question—viz., the pollution of the rivers and the waste of the finest fertilising agent known—will form suitable subjects for discussion when this most important question has been disposed of; but it may easily be shown, under the present underground cesspool system, that no solution whatever of the sewage problem has been effected, but that it has failed altogether, whether it is viewed in the light of a sanitary, an agricultural, or a financial question.

I am, Sirs, yours &c.,

Birmingham, May 20th, 1889. E. CHESSHIRE, F.R.C.S.

THE LOW RATES OF PROVIDENT MEDICAL CLUBS.

To the Editors of THE LANCET.

SIRS,—A paper which I lately read on provident medical clubs at the West Midland Poor-law Conference at Malvern seems to have offended a writer in your pages (THE LANCET of May 18th, 1889, page 999). His comment is written in a very different spirit to that which, in my opinion, animates the enlightened and wide-minded medical men with whom I have had the privilege to come in contact and been in correspondence with. Does he forget that working men's benefit societies are attended by medical men at a similar rate and on similar principles to those of provident medical clubs and dispensaries? The mutual assurance principle on which they are worked is a sound one, and surely it were more reasonable to sketch out a better plan than to inveigh against a recognised one. Let him do this, and the working man will thank him, and the ratepayers too. I deny, in fact, that the principle as put into practice either leaves the medical profession without

self-respect or the respect of those who benefit by it. The phrase he coins and uses, "if the people could be got into medical clubs," shows the view he takes of the movement. But the working man in these days is not a log to be shoved and shunted about and patronised. His intelligence has been aroused and is still at work. By combination he can assert himself and improve his own condition. If those who, by experience or education, can help him or direct him to do so, it is good work done. A letter published in the *Birmingham Daily Post* explains that those alluded to by Alderman Stanton as riding in their carriages have risen in the world and ceased to be members of the Coventry Provident Dispensary, but have entered into a private arrangement to be supplied with drugs from it.

I am, Sirs, yours faithfully,

FRED. TOWNSEND, M.P.

The Little Cloisters, Westminster Abbey, S.W., May 19th, 1889.

*** We are sorry if there was anything in our notice of Mr. Townsend's paper to justify him in separating us from the "enlightened and wide-minded" medical men with whom it is his privilege to associate. We assure him that that is the class of medical men whom we most affect and humbly try to represent. We fear Mr. Townsend found it more easy to criticise our supposed "spirit" than to refute our figures and facts. Does he maintain or not that £40 a year is a rate of remuneration to sustain, much less to stimulate, "enlightened and wide-minded men," or that for such sums dispensaries are likely to get the best service? We are not of those who would "shove" the British workman into any institution. But we know good British workmen that pay their medical men reasonable sums, and who have sense enough to realise that they get due value for it. We have no objection to the mutual assurance principle, but those who use it should recognise the value of medical education and work. The explanation by the writer in the *Birmingham Daily Post* of those members of the Coventry Provident Dispensary who ride in carriages is not entirely satisfactory.—ED. L.

"CLINICAL USES OF RARE DISEASES."

To the Editors of THE LANCET.

SIRS,—In his oration on the above subject published in your last issue, Mr. Hutchinson enunciates a very important principle. Any given disease, says he, may vary in its intensity or degree of development, and an individual may suffer from any degree or intensity of a disease from the barest touch of it to the fullest development. Mr. Hutchinson tells us more than this; but I wish to refer to the above statement only, my object being to fix the attention of the profession as widely and deeply as possible on an important and not generally recognised truth. This end will, I think, be best served by adding, from my own experience, to Mr. Hutchinson's illustrative examples.

1. I frequently see cases of anæmia with slight pigmentation, which I believe to be ill-developed forms of Addison's disease. 2. I am acquainted with a gentleman whose opinion of his own powers is so extravagant that I regard him as the victim of general paralysis of the insane. He has not altered in this respect during the last thirty years, and he is regarded by everyone as a perfectly sane person. 3. A gentleman of high professional repute is, in my opinion, suffering from "paralysis agitans," and, paradoxical as it may seem, I attribute his professional success in some measure to his disease; it makes him slow and cautious, and prevents him from rushing at wild conclusions. I found my diagnosis on his utterance chiefly, but also on his facial expression and the general stiffness of his movements. Like myxœdema, paralysis agitans is, I believe, in its ill-developed forms, a common complaint. 4. I personally sometimes suffer from slight pain in the left temple, with swelling of the temporal artery. I have little doubt that this is an ill-developed form of megrim—a "baby megrim," so to speak; and in reference to this disorder I recall the case (described by Dr. Clifford Allbutt) of a patient who suffered from periodic megrim with vomiting, but who in course of time lost all the symptoms save the vomiting, which recurred at the wonted times. In like manner vomiting may, according to Dr. Allbutt, become the "limb or remnant" of a gastralgia. Now, without a proper history of such cases, how could we possibly form a correct diagnosis?

I am, Sirs, yours faithfully,

May, 1889. HARRY CAMPBELL, M.D.

PUNCTURE OF THE ABDOMEN FOR TYMPANITES.

To the Editors of THE LANCET.

SIRS,—Having observed recently cases of tympanites reported in THE LANCET in which it was necessary to puncture the intestine with a trocar before the patient was relieved, I beg to state that in one case which occurred in my practice a short time ago relief was instantly obtained by the patient being placed in the knee-elbow position after other means had completely failed. This simple device is worthy of a trial before having recourse to more severe measures.

I am, Sirs, yours truly,

Rotherham, May 21st, 1889. WM. OXLEY.

MANCHESTER.

(FROM OUR OWN CORRESPONDENT.)

The Assizes.

A CASE of some medical interest came on for trial in the civil court during the recent assizes. The plaintiff had had a house built, and sued the builder thereof for defective work in putting in the drains, whereby it was alleged that he himself, his wife, and children contracted diphtheria and scarlet fever. The evidence clearly proved that the drains were in a bad condition, and, as stated by the medical man in attendance, whose opinion was supported by Dr. Dreschfeld, the diphtheria was in all probability the result of this defective drain, and possibly also had something to do with the children's attack of scarlatina. Unfortunately, as so often happens, conflicting medical evidence was forthcoming on the other side. Another member of the Infirmary staff gave it as his opinion that the drains were not the cause of the illness. The moral of the case would seem to be that more efficient supervision by the authorities is necessary over the erection of new houses. Here was a new house, built less than two years ago, with drains in such a state as to render the dwelling unsafe to live in. The jury considered that the illness had not been with certainty traced to the drains, and only allowed plaintiff the money spent for putting them in order, ignoring his claim for damages on account of his family's illness.

Artisans' Dwellings.

The members of the City Council almost unanimously accepted the resolution brought before them at the last meeting, empowering the Unhealthy Dwellings Committee to go on with its work of demolishing unhealthy property, and also authorising them to prepare plans or bring forward a scheme for the erection of artisans' dwellings to take the place of some of the unhealthy ones abolished. If this movement be carried out steadily and sufficiently, an important step will be taken to secure some diminution of our still scandalously high death-rate. Measles, scarlet fever, and typhoid have been unduly prevalent in the city lately. A hundred deaths from measles were registered during the past four weeks, and forty cases of typhoid fever and upwards of a hundred and twenty cases of scarlatina reported during the same period.

Officer of Health to Salford.

In place of Dr. Tatham, the Salford Town Council has appointed Mr. C. E. Paget as medical officer of health. Mr. Paget is a son of Sir George Paget of Cambridge, and has for some few years held a similar post to a rural district in Westmoreland. His name is well known in connexion with school sanatoria, to which he has given much attention. He will find ample scope in Salford for work in endeavouring to improve the health of the population, many of whom are living under conditions utterly incompatible with health and vigour, or even decency and morality. A "Working Men's Sanitary Association" has just been formed, with a view to discovering and bringing forcibly to the attention of the authorities the worst insanitary conditions, and stimulating them to more vigorous action. The inquiry lately held by the Local Government Board respecting the proposed

new Fever Hospital for Salford came to an unexpected termination. Much opposition was shown to the proposal, and after the inquiry had gone on for several days, a suggestion was made that another spot at Brindle Heath was much more suitable. This suggestion the corporation have apparently fallen in with, and the inquiry, so far as the first site proposed is concerned, was adjourned *sine die*. The proposed amalgamation of the two municipalities of Manchester and Salford was negatived last week by a large majority of the Salford Council.

Rabies.

For some years part of the counties of Lancashire and Cheshire have at times had a considerable number of cases of hydrophobia. At the last petty sessions held at Sale, the subject was under consideration by the magistrates, and an order was issued for the keeping of all dogs in that district under control. This action has arisen out of a case of rabies which occurred a short time ago, when a considerable number of dogs were known to have been bitten by the affected animal. It is, however, hoped now that all these have been destroyed.

Ancoats Hospital.

Mr. Hare, Professor of Surgery at the College, has been appointed one of the honorary surgeons to the Ardwick and Ancoats Hospital. Hitherto he has been without any hospital appointment, where his instruction in the College classes could be followed up by practical demonstration. There is a considerable field for work here, but unfortunately the hospital is situate somewhat out of the way, and up to the present has not served for clinical instruction to the students.

May 21st.

LIVERPOOL.

(FROM OUR OWN CORRESPONDENT.)

Abdominal Surgery.

A RARE case in abdominal surgery is at present under the care of Dr. Briggs. A male patient, aged fifty-nine, has been known to have a cyst in the liver for the past four years. About four and a half months ago the cyst became so large and tense that its mechanical inconvenience led the patient to seek relief; tapping was advised and six pints of fluid which proved to be blood were withdrawn; there was no bile in the fluid. After a second tapping and the withdrawal of eight pints of similar fluid, the cyst was thought to be suppurating and the patient had alarming febrile symptoms. Abdominal section in the light linea semilunaris was performed by Dr. Briggs, and the liver carefully sutured to the abdominal wall before a drainage tube was inserted; twelve pints of putrid tarry blood flowed from the cyst, whose walls are now undergoing contraction. It is more than six weeks since the operation; the man has been sitting up for the past week, and is apparently slowly but steadily gaining flesh. No hooklets could be detected in the fluid, although it seems probable that in the first instance a hydatid cyst had led to perforation of a hepatic vessel and hæmorrhage within its walls.

The Alleged Case of Overlaying a Child.

In charging the grand jury at the Spring Assizes, which commenced here on the 20th inst., Mr. Justice Stephen observed that "there was a case against a man named Alfred Jones and a woman of the name of Elizabeth Moore, who were committed on a charge of manslaughter, but it would come before them because it was committed by the coroner. Those two persons appeared to have lived together as husband and wife. They went to bed together one night apparently drunk, and between them they contrived to overlay and smother a girl of the name of Moore, the woman's daughter. Certainly, if that was true, it was a case of manslaughter, because people must keep sober and not go to bed in that disgraceful condition, and if they did they must place the child where it could not be hurt."

The Royal Infirmary.

Under the will of Mr. George Holmes, a former resident of Liverpool, a sum of £13,000 has been left to the Royal Infirmaries of Manchester and Liverpool and to the General Infirmary of Sheffield, each receiving a little over £4000. The deceased, who was somewhat eccentric, made his own will. It is to be hoped in the interest of the charities that there will be no difficulty in dealing with the will and realising the legacies.

Rival Claimants to a Legacy.

The judge of the Westminster County Court had to decide whether a legacy left to the "Eye and Ear Infirmary, situate at Liverpool," was the St. Paul's Eye and Ear Hospital or the older established Eye and Ear Infirmary. His honour decided in favour of the latter.

Liverpool, May 21st.

NORTHERN COUNTIES NOTES.

(FROM OUR OWN CORRESPONDENT.)

Carlisle.

A MASS MEETING of the workmen of the various trades in Carlisle has been held to protest against the sweating system, which, it appears, is not altogether unknown in the Border city.—As regards the outbreak of measles in Carlisle, the medical officer of health, Mr. W. Brown, writes to say that, although he does not advise the closing of schools for ordinary measles, he very strongly does so when the disease shows a virulent type, and thinks that the infected schools should be closed for a considerable period, pointing to the Glasgow instance as showing that where children are massed together the probability of a propagation of any prevalent disease is very much increased.—The annual collections for the Hospital Sunday Fund were taken last Sunday, and although the day was wet, and so may have unfavourably affected the contributions, it is believed that when the aggregate amount is made up it will exceed that of late years.

Middlesbrough.

The resolution of the Middlesbrough Town Council to sanction the construction of a crematorium for the borough is looked upon by most people as an advanced, but still as a sensible, step. It is, however, curious that one of our youngest boroughs should be the first to move in this matter.—Dr. McCuaig, who has been instructing the police of Middlesbrough, in giving his final lecture alluded to matters of importance which might be noted with advantage in railway management. He suggested that a few elastic appliances might be kept in the various railway stations which could be used as tourniquets in cases of hæmorrhage from injury, and applied readily by those servants of the company and others who have been instructed in ambulance work, pending the arrival of surgical aid. The method is so simple and so inexpensive that it scarcely requires many words to commend it to our railway authorities.

Newcastle-on-Tyne.

A representative meeting of the Friendly Societies was held here last week to promote the scheme of Dr. Robinson of Stanhope to establish convalescent homes on the west coast for the members of the societies in the north-eastern counties. The Mayor presided, and fully supported the project. Dr. Robinson attended, and gave a summary of the scheme. Mr. H. W. Newton, surgeon, and ex-mayor of Newcastle, also, with other resident medical men, advocated the movement. Some of its leading features were very forcibly put—such as that the homes will reduce materially the burden of sick pay pressing on the lodges by perfecting health after sickness, thus lessening the number of cases of permanent sickness, and shortening the periods of relief granted to long-continued but not permanent cases of illness. The homes are to be self-supporting and self-governing, and not charitable undertakings. The present convalescent homes are inadequate for the requirements of the district, and climatic conditions render them only available for a very short period in the year—at least for a large class of cases.

Newcastle-on-Tyne, May 21st.

THE WORTHING INFIRMARY.—The ceremony of opening the new children's ward took place on the 14th inst. The ward has been furnished by gifts from those interested in the institution, thus relieving the committee of management from encroaching upon their funds. It contains eight cots, one of which was presented by Mr. E. C. Patching.

EDINBURGH.

(FROM OUR OWN CORRESPONDENT.)

The Edinburgh Royal Infirmary.

NUMEROUS radical and most important changes have within the last few months been carried out in the various out-patient departments in the Royal Infirmary. Some time ago a meeting of the surgeons and assistant surgeons took place, at which it was suggested that a plan somewhat similar to that obtaining on the medical side of the "house" should be put into force on the surgical side. In the medical department, the out-patients are first seen by the assistant physician on duty for the day. They are used by him for teaching purposes, and some are treated as out-patients, whilst others are sent to the wards. In the surgical department, the surgeon, and not the assistant surgeon, is supposed to see the out-patients; but, as may be easily imagined, it is often impossible for him to see more than a tenth part of those who present themselves. Part of this work is now to be delegated to the assistant surgeons, who will thus have far more responsible duties to perform than heretofore, whilst the patients will also be great gainers, as they will all be attended to by men having wide knowledge and extensive experience, instead of being left to the care of a senior student, who, however diligent a student of surgery he may be, cannot have a very wide range of experience. The change should work well in every respect. The surgeons will be relieved of some of their routine duties, and will thus be able to devote their whole time and energy to their ward work, and the assistant surgeons will not only be able to see a large number of patients, but they can draw off some of the students from the too crowded cliniques of their seniors. The step is certainly one in the right direction. And the most important proposed change is that of doing away with the post of non-resident clinical clerk in the eye wards, who has hitherto been appointed half-yearly, and to put in his place a permanent assistant surgeon. The honorary resident clinical clerk is usually a graduate who wishes to study ophthalmic surgery. He holds his appointment for six months, but in certain cases a reappointment has been made. It has been felt that some rather more responsible and experienced personage would under certain circumstances be more useful than the clinical clerk. Hence the proposed change. It is stated that Dr. George Mackay, who has paid considerable attention to ophthalmic practice, will in all probability be appointed to the newly-formed office.

University Examinations.

The clinical examinations in connexion with the M.B. degree are now in full swing. A larger number of candidates have presented themselves for examination this year than on any former occasion.

The Medical Students' Athletic Club.

It is stated in one of the evening papers that some effort is to be made to obtain a piece of ground in Edinburgh for the use of the University Students' Athletic Club. Such an effort should be successful. The present ground is so far from town that students do not care to go to it or to pay for the use of it. *Apropos* of this, there is some talk of an athletic contest between the Edinburgh students and the United London Hospitals Club. What ground there is for this rumour it is difficult to find out, but there certainly is such a rumour extant.

Edinburgh, May 21st.

DUBLIN

(FROM OUR OWN CORRESPONDENT.)

Royal College of Surgeons.

A MEETING of the Council was held last Thursday for the purpose of electing examiners for the ensuing year. It was generally believed that either Mr. Barton or Mr. Thornley Stoker or both were ineligible, as being senior of the Anatomy examiners; but, inasmuch as Anatomy and Surgery are now conjoined, instead of being separate as heretofore, the President ruled that they were eligible for election, Mr. Thomson, the senior member of the court, alone being ineligible for re-election. Both the senior examiners in Anatomy were re-elected; but several important changes have taken place among the examiners. There are two new examiners in Surgery—Sir William Stokes, Professor of Surgery in the College of Surgeons, and Mr. William Stoker, lecturer on Surgery in the Ledwich School of Medicine, and a new examiner in Physiology, in Midwifery, Ophthalmology, &c. I learn that Mr. H. Gray Croly, senior surgeon to the City of Dublin Hospital, will not be opposed for the vice-presidency, as Mr. R. H. Moore has withdrawn his opposition, and will only seek a seat on the Council. He will be well supported, and deservedly so. The other candidates for the Council are, besides those already mentioned—Mr. Cranny; Mr. William Thomson, surgeon to the Richmond Hospital; Mr. Lentaigne, surgeon to Jervis-street Hospital; and Mr. Nixon, surgeon to Mercer's Hospital; whilst it is probable that Mr. C. B. Ball, surgeon to Sir P. Dun's Hospital, will also come forward. Altogether there will be five or six candidates for four vacancies.

The Annual Report of the Council states that during the past year 22 candidates were admitted to the Fellowship; 57 candidates, having passed the Conjoint Examination with the College of Physicians, received the Letters Testimonial; 15 received the Letters Testimonial of the Apothecaries' Hall Conjoint Examination; and 6 registered practitioners received the Letters Testimonial after examination by the College separately. In addition, 18 practising dentists received the licence in Dentistry; three the diploma in Public Health; and a solitary candidate the diploma in Midwifery. The greater portion of the report is taken up with the details of the proposed amalgamation scheme of the medical schools, and the correspondence relating thereto; while reference is also made to the application of the College to the Secretary for War to nominate a member to sit on the Commission to inquire into the status and emoluments of medical officers in Her Majesty's army, and other matters affecting that branch of the service. As regards amalgamation, the scheme is now in the hands of the College solicitor, preparatory to his advising the Council as to the course to be pursued to make the amalgamation legal. The solicitor has submitted a memorandum, which is now under the consideration of the committee, and, if the course proposed be approved by the Council, immediate steps will be taken to carry into effect the resolution of the College in favour of the plan.

University of Dublin.

A special meeting of the Senate was held last week for the purpose of nominating candidates for a seat on the Council, which had become vacant by the decease of Dr. Robert McDonnell. Among the names was that of Dr. Banks, who was proposed by Dr. Moore, physician to Her Majesty in Ireland, and seconded by Dr. Edward Hamilton, surgeon to his Excellency the Lord-Lieutenant. The election will be by voting papers, and unless some one candidate has an absolute majority of the total number of votes a second voting paper will have to be issued.

Honours for the Medical Profession in Ireland.

It is rumoured that Sir George Porter will shortly receive a baronetcy, and that another Dublin surgeon will be knighted. Sir George Porter well merits this honour being conferred upon him, but so many statements of a somewhat similar kind having proved unfounded, it is difficult to place much reliance on the present rumour. At the same time there is a consensus of opinion among the medical profession in Dublin, and indeed throughout Ireland, that, if State honours are to be bestowed, the name of Sir George Porter should be first in the list.

The Case of Leprosy in Dublin.

The case of leprosy in the Whitworth Hospital is engaging the attention of the sanitary authorities. Sir Charles Cameron, medical officer of health for Dublin, who has interested himself in the matter, reports that the army authorities have offered no facilities in the way of the removal of the patient, an army pensioner, to Netley Hospital. He is of opinion that the Union Hospital, where he could be thoroughly isolated, would be the proper place for him, but the Board of Guardians have declined to move in the matter. A lady residing at Birmingham, who states she has had twenty years' experience as a nurse, has written to the South Dublin Union guardians expressing her willingness to take care of the leper, and numerous subscriptions have been sent to the hospital authorities to render his

condition more comfortable. It is thought by some that the best solution of the difficulty would be to send the patient to one of the numerous leper hospitals which exist in Norway, and if this suggestion were adopted there would not be the slightest difficulty in obtaining the necessary funds for his transmission.

Medical Inspectorship, Local Government Board.

By the death of Dr. John Todd, at the early age of forty-six years, which occurred at Omagh on the 13th inst., a medical inspectorship under the Local Government Board becomes vacant for the Galway district. There are nearly one hundred applicants for the post, but I am informed that the Chief Secretary for Ireland, in whose gift the appointment lies, has nominated Dr. Thomas Browne as successor to Dr. Todd. Dr. Browne is medical officer of Dungannon Dispensary District, and, I believe, is also connected with the Workhouse Hospital.

Dr. Dillon, consulting sanitary officer, has called the attention of the Ennis Town Commissioners to the necessity of erecting public baths for that town. It is very improbable, however, that the Board of Works will advance the necessary funds, inasmuch as the Commissioners are already indebted to the amount of £1000 to that body.

The Local Government Board have sanctioned a loan of £4000 for the construction of the new waterworks for Listowel. The supply will be taken from the Feale outside the town, where turbines will pump it to Ballygrennan Hill.

Dr. Peter Macarthur, of Greyabbey Dispensary, has been presented with an illuminated address, accompanied by a purse of sovereigns.

The annual meeting of the Irish Medical Association is announced to be held on June 3rd, and the jubilee dinner of the Association will take place the same evening in the Albert Hall of the College of Surgeons.

Dublin, May 21st.

BERLIN.

(FROM OUR OWN CORRESPONDENT.)

The Musk Fungus.

In the Hygienic Institute here, of which the celebrated bacteriologist, Professor Robert Koch, is the head, a Japanese physician named Kitasato has discovered a new fungus, possessing properties hitherto unobserved in bacteria. Its distinguishing quality is that it emits an odour like that of musk. It thrives best on bread, rice pap, and potato pap. Its cultivations are at first reddish, afterwards tile red. In form it belongs to the faxisporium species.

Police Measures against Consumption.

The studies which Dr. George Cornet has made, under Dr. Koch's guidance, on the propagation of tubercle bacilli, have induced the President of the Berlin police to issue certain regulations for hospitals. Dr. Cornet has proved that the spread of consumption is largely due to the circumstance that the sputum of consumptive patients, which always contains tubercle bacilli, floats about in the air after being dried and pulverised, and is inhaled by healthy people. The President of Police has, therefore, ordered that consumptive patients in hospitals shall be kept in special wards, and forbidden to expectorate on the floor or into their handkerchiefs, but only into vessels partly filled with water; that the sputa shall be removed in a wet condition; and that their clothes and linen shall be thoroughly boiled and disinfected. These regulations are to be enforced not only in hospitals, but also wherever consumptive patients live.

Coast Hospitals for Children.

The Society for Children's Health Homes on the German Coasts held its general meeting on the 29th ult. The President referred to the interest taken in the work of the Society by its illustrious patron, the late Emperor Frederick, and by the Empress Frederick, at whose instance the annual subscription of 4000 marks continues to be paid from the Victoria Fund. The number of the children who were received during the past year in the four homes of the Society at Norderney, Wyck, Gross-Müritz, and Zoppot was 884, nearly 200 more than the year before. The children who derive most benefit are those suffering from anæmia and scrofula. The average number of days spent by each child at the homes is 53, and the average gain in weight, 1·8 kilo. The expenditure for the past year was 97,283 marks (£4864 3s.).

Short Sight.

Last year Professor Stilling of Strasburg brought forward a new theory of the origin of short sight which excited great interest at the time. He declared it to be due to a peculiarity in the structure of the skull, and laid it down as a natural law that lowness of orbit is the condition of short sight. He found that the short-sighted pupils in several schools in Strasburg had much lower orbits than the rest. This theory was eagerly turned to account by some pedagogues, who were delighted to find an expert who declared that short sight is not due to abuse of the eyes in schools. To prevent the injury to the great cause of school hygiene likely to arise from Stilling's theory, a distinguished champion of that cause, the well-known Breslau oculist, Professor Hermann Cohn, has published an article on the subject in this month's number of the *Deutsche Revue*. Stilling's theory, he says, has not stood the test of recent investigations made by Professor Schmidt-Rimpler of Marburg on 1299 orbits. He maintains further that a law of nature cannot be proved by a thousand cases, but perhaps only by ten thousand; and adds that most short-sighted people are not born so, but become so at school. "Let us not be led astray," he concludes, "by brilliant theories, in our energetic battle against the spread of short sight, and let us strive, by more and more zealous introduction of the most rational school hygiene, to prevent the increase of this evil, which even in a slight degree is a defect, but in a higher degree a real disease." Professor Förster, head physician of the Royal Eye Hospital in Breslau, maintains, again, that short sight in children is not infrequently due to their wearing too tight collars.

Medical Literature.

Professor Oskar Fraentzel, one of the most gifted pupils of Ludwig Traube, is writing a great work on diseases of the Heart. The first part, which has now appeared, treats of idiopathic hypertrophy of the heart, a disease which has been studied here chiefly since the French war, and of which Fraentzel has been one of the most successful investigators. The second edition of Dr. Robert Flechsig's "Bäder-Lexikon" ("Cyclopædia of Watering-Places") has just come out. It is larger than the first, and considerably altered otherwise. It describes all the well-known watering-places, healing springs, water-cure establishments, and other health resorts of Europe and Northern Africa, from the medical, topographical, economical, and financial points of view. The fourth edition of a similar work, the "Bäder-Almanach," by Helfft and Thilenius, which gives information about the health resorts of Germany, Austria, Hungary, and Switzerland, has also been published.

Professor Krafft-Ebing.

Professor Krafft-Ebing, whose call to Vienna was a settled matter, will leave Austria and establish a hospital for nervous patients in Berlin or Wiesbaden, probably Wiesbaden. The negotiations with him fell through at the last moment, because he insisted on being made wholly independent of Professor Ganster, head physician of the Vienna Lunatic Asylum.

Drs. Petri and von Esmarch.

Dr. Petri, hitherto keeper of the Hygienic Museum, has been appointed chief of the bacteriological department in the Imperial Office of Health. His successor is Dr. Erwin von Esmarch, a son of the celebrated professor and surgeon of Kiel. Both of these men are worthy and successful labourers in the vineyard of which Koch is the chief tiller.

The Red Cross.

About 400 Red-cross men performed a sham rescue lately on suitable ground near Berlin, saving the imaginary wounded from a battle-field during and then after the battle. Three surgeons, who were present as critics, expressed extreme satisfaction at the way in which the work was done.

School Hygiene.

The Prussian Minister of Education intends to establish courses of instruction in hygiene for teachers of gymnastics. He has also ordered investigations to be made as to the accumulation of dust in schools, and measures to be taken for its effective removal.

A committee, of which Professor Gerhardt is a member, has been formed for the establishment of a great hospital

for children suffering from rachitis and scrofula in the neighbourhood of one of the most important German salt springs.

It is said that the Anatomical and Pathological Museum of Brunswick is soon to be presented by the Principality of Brunswick to the University of Göttingen.

Dr. von Düring of Hamburg has been called to Constantinople as Professor of Dermatology.

Professor Westphal is prevented by illness from lecturing this summer session. His work will be done by his assistants, Dr. Liemerling, who will lecture on Mental Therapeutics, and Dr. Oppenheim, who will lecture on Diseases of the Nerves.

Professor Rinne of Greifswald has been appointed surgeon to the Elizabeth Hospital here.

The number of physicians and surgeons in the German Empire on April 1st, 1887, was 15,824, including medical officers in the army and navy, who numbered 1335.

Herr Dietrich Gerhardt, a son of Professor Gerhardt, Rector of Berlin University, graduated on the 11th inst. as Doctor of Medicine "summa cum laude."

Berlin, May.

EGYPT.

(FROM OUR OWN CORRESPONDENT.)

Army of Occupation.

THE present sick-rate of the British troops is satisfactorily low. There are 110 sick in the Citadel Hospital in Cairo, including 5 enteric fever cases, 5 dysentery and diarrhœa, and 27 venereal disease. In the military hospital at Alexandria there are only 65 sick, including 1 case of enteric fever, 4 of dysentery and diarrhœa, and 27 of venereal disease. The garrison in Cairo now amounts to 2000 men, and in Alexandria to 1061.

Changes in the Medical Staff.

Surgeon-General Marston, C.B., is now leaving this command for Gibraltar, and is succeeded by Deputy Surgeon-General Jameson, from Chatham. Dr. Marston will carry away with him the best wishes of his own department, of the civilian practitioners with whom he has come in contact, and of the authorities, who especially admired the plan for the excellent medical arrangements for the British troops at Suakim last December. The medical staff, besides its chief, now consists of 1 brigade-surgeon, 2 surgeons-major, 10 surgeons, 5 nursing sisters, and 82 of the staff corps. There have been several reductions this spring, and it is believed that there will be others before long.

Sickness among the Troops in 1888.

The total number of admissions to hospital during the year was 3428, with 46 deaths, being a slight decrease upon the percentage for 1887. A regiment which was brought to Egypt at the most unhealthy time of the year naturally contributed the greatest number of admissions and of deaths. Great improvements have taken place in the sanitary condition of barracks and hospitals, but it must be remembered that the British soldier nearly always contracts his disease in the foul haunts in which he chooses to spend his hours of recreation. For instance, although there was no small-pox in Alexandria during the year, there were in Cairo 14 admissions and 4 deaths occurring in men taken from six different corps, and living for the most part in barracks far distant. Two cases of scarlatina (one in Cairo, and one in Alexandria) were reported. These isolated cases are very interesting in a country where the disease is almost unknown. As usual, there was a large number of admissions from simple continued fever, some of which were perhaps mild forms of enteric. In all, there were 392 cases in Cairo and 49 in Alexandria. This disease reached its maximum in August with 130 cases, and its minimum in February with 6 cases. August is the month when the Nile is at its highest, when there is infiltration under its banks, and when the subsoil water is raised to five feet or less from the surface. During this month it has been found necessary to remove the troops from Kasr el Nil Barracks into camp in the desert. The British soldier would seem to be more liable to dysentery than the civilian, for during the year there were 168 admissions from that cause, and 8 deaths. There were 13 cases of malaria admitted, as compared with 126 in 1887. The disease in 1887 was for the most part contracted in Mex Camp, Alexandria, which during the prevalence of southerly winds was exposed to malarious poisoning from Lake Mareotis, as it subsided with the low Nile. This camp has since been changed to a healthier site, with the above result.

Enteric Fever among the Troops.

This disease is the most important one for consideration. It has caused 20 out of the whole number of 46 deaths in 1888. In Cairo there were 65 admissions, with 14 deaths, or a death-rate per 1000 of the strength of 6·4. In Alexandria there were 30 admissions, with 6 deaths, or a corresponding death-rate of 5·6 per 1000. Among the improvements recommended by Dr. Marston was one having special reference to enteric fever at Alexandria. It was found that one of the barracks had a low site close to a cemetery and with a native village to windward. The rooms were difficult to ventilate, and those of the lower ranges were only fit for stores. It was consequently advised that troops should no longer be quartered in this barrack. Some improvements are being made also in the town main drainage. On arrival the English soldier is unfortunately nearly always at the age when he is most susceptible to enteric; and when to this is added his recent arrival in a hot country, his habits, and his haunts in an insanitary Oriental town, it is not wonderful that there are always some cases of the disease in the military hospitals. If it were possible to send to Egypt as soldiers only those who were already grown and drilled men, and to take care that no new troops disembarked during the summer months, something might perhaps be done to diminish still further the sick-rate. There would seem to be, moreover, a latent idea in military circles here of the expediency of withdrawing troops from Kasr el Nil Barracks, which I have already shown are unhealthy during the Nile flood, and of increasing the number of men at Abbassiyeh, where there are excellent barracks, dating from the time of the Khedive Abbas, and the purest desert air, stretching away to Suez and the Libyan Hills.

French Hospital at Ismailia.

The Suez Canal Company established last July a three-pavilion hospital upon a delightful spot, open to all the soft breezes, and with an unrivalled view both up and down the Canal and the neighbouring lakes and away to the rugged mountain which overlooks Suez. Two of the pavilions contain thirty beds each, and were half full when I visited them. There are private rooms for first-class patients at 12*s.* a day, and second-class at 10*s.* a day, and a clean, cheery ward for humbler visitors at 4*s.* a day. The floors are of unpolished parquet wood from Paris, and the walls are suspiciously absorbent, but there is plenty of ventilation; and though there are cesspools at the corner of the garden running into the canal, the sanitary question has evidently been well considered. The central pavilion is used as an administration block, and is connected with the others by roofed-in passages. Here also live the two doctors and four *sœurs de charité*. The chief objection to the hospital is its distance from the town. At my visit the one omnibus of Ismailia was conveying to it a priest, a doctor, and two patients who had been allowed leave of absence. The Egyptian Hospital has been closed for want of funds, and because Port Said and Suez are considered sufficiently near. Indeed, there were never many native patients at Ismailia to use the hospital, but it was very useful as a convalescent resort for scrofulous patients from the Cairo Hospital. Ismailia has been often cursed with malarial fever of late years, and this is the more noticeable because there is very little malaria in other Egyptian towns. The inhabitants protested that the malaria was due to the canal, and to the admixture of fresh water from Cairo and the salt water there. This was disbelieved, but, as an experiment, the mixture was not allowed to take place, and the local doctor vouches that, in consequence, the fever cases have been reduced from 423 to 60.

Cairo, May 11th.

THE FATAL FOOTBALL DISPUTE.—James Tattersall, of Leyland, a football player, who had a *fracas* after a match in April last with Mawdsley, a referee, the latter dying shortly afterwards, was indicted for manslaughter at the Manchester Assizes last week, and acquitted. The defence was that Mawdsley was suffering from phthisis, and that his death was not due to violence.

Obituary.

SURGEON-GENERAL JOHN SHORTT, M.D.

WE much regret to announce the death of Retired Deputy Surgeon-General John Shortt, I.M.D., at Tercaud, Madras Presidency, on April 24th. His life-long labours in the cause of science, which were repeatedly acknowledged by the Governments of India and Madras, were continued to the last. He devoted a great portion of his busy life to the discovery of an antidote to cobra poison, and conducted many experiments to attain this object, but without success. When the late Dr. Druitt visited India in 1870, it was remarked to him by the present Surgeon-General of Madras (Dr. Bidie) that no man had ever rendered greater service to the cause of humanity than Dr. Shortt. The *Madras Mail* of May 1st says: "Dr. Shortt's deserts were great, and his friends would have been glad if the Government had marked its sense of what, at great personal risk, he had tried to do, by conferring on him the decoration instituted in 1878 'to reward services rendered to Her Majesty and her Indian Empire.' The grave has closed over a kindly gentleman and an observant naturalist."

John Shortt, M.D., M.R.C.P.L., M.C.V.S. Edin., F.L.S., F.Z.S., F.R.A.S., Fellow and Corresponding Member of the Anthropological Societies of London, Paris, and Berlin, Fellow of the Obstetrical Society of London and of the Madras University, &c., was born in Arcot, India, in 1822. He received his commission as Assistant Surgeon in England in 1854; became Surgeon in 1866, and Surgeon-Major in 1874; and retired with the rank of Deputy Surgeon-General in 1878, the fifty-five year retirement rule having been extended in his case for one year owing to his valuable services during the famine. He was a bold and skilful surgeon, author of many papers directly connected with his profession, and a voluminous writer on general science. Only a few weeks ago a review of a work by him on the Coca Palm appeared in one of our contemporaries; this was most favourably spoken of, as it evinced much research and great knowledge.

ENRICO BUONAMICI.

AT Florence, on the 7th inst., died Dr. Enrico Buonamici, in his seventy-second year. He had been ill for some weeks, although it was only on the 4th inst. that he took to bed. Symptoms of typhoid had declared themselves, but the fatal termination was due to sudden heart disease.

Dr. Buonamici, after a thorough training in the medical sciences, devoted himself, on graduation, to materia medica and toxicology—a department in which he became so proficient that he was appointed to the chair set apart for it in the Reale Istituto di Studii di Perfezionamento (the Royal Institute of Studies for the Higher Qualification). His knowledge of the subject was only less remarkable than his expository power, which made his lectures famous, and filled his class-rooms with yearly increasing audiences. He retained with his pupils in after-life the popularity he had earned at the opening of their career, insomuch that the news of his quite unexpected decease evoked messages of condolence with his family and colleagues from occupants of professorial chairs and from busy practitioners in nearly every considerable town of Italy.

JOHN TODD, M.D. EDIN., &c.

WE regret to announce the death, while on a visit to his brother-in-law at Omagh, of Dr. John Todd, medical inspector, Local Government Board, for the province of Connaught. Deceased contracted the malady from which he died whilst performing his duty in the service of the sick poor about a year ago. He rallied for a time and went to the south of France, only, however, to return home to die, at the comparatively early age of forty-six, beloved and respected by a wide circle of friends.

ALEXANDER FAIRBROTHER, M.D. EDIN.

WE regret to announce the death in his eightieth year of Dr. Alexander Fairbrother, which took place at his residence in Berkeley-square, Bristol, on May 13th. The deceased gentleman, who retired from practice about twenty years ago, was a well-known and popular figure in Bristol. For one remarkable case, in which, accidentally arriving on the quay amidst a group of persons standing around a man who had been pulled out of the harbour and was supposed to be dead, Dr. Fairbrother persisted in his efforts until he restored animation, he received the gold medal of the Royal Humane Society. A few weeks ago he caught a severe cold, from which he never recovered.

THE SERVICES.

ARMY MEDICAL STAFF.—Surgeon-Major James Wilson, M.B., to be Brigade Surgeon, ranking as Lieutenant-Colonel, vice C. H. Giraud, promoted (dated May 7th, 1889); Surgeon-Major Wm. Folliott, F.R.C.S. Irel., to be Brigade Surgeon, ranking as Lieutenant-Colonel, vice G. C. Gribbon, M.B., granted retired pay (dated May 8th, 1889).

ADMIRALTY.—The following appointments have been made:—Mr. Horace Lawton Swete, to be Surgeon and Agent at Goodwick (dated May 21st, 1889); Staff Surgeon Evelyn R. H. Pollard to the *Ruby*, and Staff Surgeon Horace E. F. Cross to the *Ganges* (both dated May 22nd, 1889).

VOLUNTEER CORPS.—*Rifle:* 3rd Volunteer Battalion, the Northumberland Fusiliers: Surgeon W. C. Wicks, M.B., resigns his commission (dated May 18th, 1889).—1st Roxburgh and Selkirk (the Border): Surgeon G. H. Turnbull, M.D., to be Surgeon-Major, ranking as Major (dated May 18th, 1889).

Medical News.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen passed the First Professional Examination for the diploma of Fellow at a meeting of the Board of Examiners on the 15th inst.:—

A. Caddy, Student of St. George's Hospital; H. C. Barr, of St. Mary's Hospital; H. E. Rayner and W. P. G. Graham, of London Hospital; E. T. Collins and J. Murray, of Middlesex Hospital; E. Wilkinson, of University College; O. V. Pisani, of King's College; A. T. Rake, of Guy's Hospital; and G. Andrews, of London Hospital and Owens College, Manchester. (Nine candidates were referred for six months.)

Passed on the 16th inst.:—

A. Whitfield and T. G. Brodie, of King's College Hospital; C. E. Pollock and C. E. Salter, of Guy's Hospital; F. B. Rutter and H. L. Rutter, of Durham and London Hospital; and Arnold Lawson, of Middlesex Hospital. (Nine candidates were referred for six months.)

Passed on the 17th inst.:—

W. H. Vickery and C. E. Soulby, of Middlesex Hospital; H. V. Drew and W. H. Evans, of University College; R. G. Hogarth, of St. Bartholomew's Hospital; George Jones, of London Hospital; and T. H. Kellock, of St. Thomas's Hospital. (Thirteen candidates were referred for six months.)

Passed on the 18th inst.:—

A. G. Gane, of St. Bartholomew's Hospital; Douglas Drew, of University College; D. F. Shearer, of St. Thomas's Hospital; and A. W. Sturdee, of London Hospital. (Twelve candidates were referred for six months.)

Passed on the 20th inst.:—

D. J. Jones and D. C. Johnstone, of Charing-cross Hospital; E. J. Fleetwood Moore and Y. H. Mills, of London Hospital; G. E. Newby, of University College; and V. W. Low, of St. Mary's Hospital. (Ten candidates were referred for six months.)

ROYAL COLLEGE OF SURGEONS IN IRELAND.—FELLOWSHIP EXAMINATION.—The following gentlemen have been admitted Fellows of the College:—

James Patrick Rooney, Surgeon-Major Medical Staff; Thos. Reardon, Medical Officer, Doneraile Dispensary; and John Maturin, Surgeon-Major Medical Staff.

Examination for the Diploma in Public Health.—Robert Trimble, F.R.C.S. Irel., has been granted the Diploma in Public Health.

The following have been elected Examiners of the College for the ensuing year:—Anatomy and Surgery: John Barton, W. Thornley Stoker, William Stoker, Sir William Stokes. Physiology, Histology, and Pathology: C. Coppinger, R. Hayes. Midwifery and Gynæcology: R. D. Purefoy. Ophthalmology: A. H. Benson. Diploma in Midwifery: S. Mason, Jerome O'Donovan, W. Roe. Diploma in Dentistry: D. Corbet, jun., R. Hazleton, G. Murray, H. Sherlock, W. Stoker, M. A. Ward. Diploma in Public Health: E. Davy, D. Flinn, E. Lapper, J. Pratt. General Education: M. A. Donnelly, R. Morton, J. D. Pratt.

COLLEGE OF PHYSICIANS IN IRELAND.—At the May Examinations the following obtained the Licences in Medicine and Midwifery of the College:—

Medicine.—A. H. Butcher. *Midwifery.*—W. Aston.

The diploma in State Medicine has been conferred on

R. M. Hugo, Murray Mackenzie, and Harry Paynton Sloggett.

SOCIETY OF APOTHECARIES OF LONDON.—The following candidates, having passed the qualifying examination in Medicine, Surgery, and Midwifery, have received certificates entitling them to practise in the same, and were admitted Licentiates of the Society on the 10th inst.:—

Reinhardt, Arthur Hope, Leeds and London Hospital.
Wood, Frank Lomax, Owens Coll. and Roy. Infirm., Manchester.

Admitted on the 15th inst.:—

Barton, Frederic Wm., L.R.C.P., M.R.C.S., Univ. Coll. Hospital.
Bryant, Edward Mansel Robertson, St. Bartholomew's Hospital.
Hughes, Matthew Louis, L.R.C.P., M.R.C.S., King's College Hosp.
Osborne, Frank, St. Thomas's Hospital.
Raw, Thomas Owen, Guy's Hospital.
Reynolds, Austin Edward, L.R.C.P., M.R.C.S., Univ. Coll. Hosp.
Smith, Robert Edward, St. Bartholomew's Hospital.
Willson, Alfred Rivers, Oxford University.

Admitted on the 16th inst.:—

Evans, Ernest William, St. Bartholomew's Hospital.
Hamilton, Henry, University College Hospital.
Matthews, John Cox, B.A., Cambridge Univ. and Westm. Hosp.
Pooler, Harry William, Queen's College, Birmingham.

UNIVERSITY OF BRUSSELS.—The following gentleman obtained the M.D. degree (*avec grande distinction*) on the 14th instant:—

Charles W. T. Chepmell, M.R.C.S. Eng., L.R.C.P. Ed.

FOOTBALL FATALITY.—Mr. Thomas Cullen, son of Mr. Cullen, of Greenfield, Maynooth, died on Tuesday from injuries to the head sustained whilst playing with the County Kildare football team in a championship match.

MORTUARIES.—Attention has been called, in consequence of the holding of an inquest, to the want of a public mortuary at Bexley, where post-mortems have to be made under very disadvantageous circumstances. The same defect is said also to be much felt at Dartford and Sidcup.

OPENING OF THE JOHNS HOPKINS HOSPITAL, BALTIMORE.—On Tuesday, the 7th inst., the newly-built Johns Hopkins Hospital at Baltimore was opened in the presence of a distinguished assembly. Dr. J. S. Billings delivered an address upon the "plans and purposes" of the hospital, which has been constructed upon the most improved principles, at very great cost.

LITERARY INTELLIGENCE.—The Chilian Government having agreed to increase the grant to the Medical Society for the expenses of their journal, the *Revista Médica*, the editor promises that it shall be very much enlarged and improved. It has been in existence for some seventeen years, but has not obtained a sufficient circulation to enable it to attain financial success.

VOLUNTEER AMBULANCE SCHOOL OF INSTRUCTION. The classes for the next term commence in September, and will be held at head-quarters, Queen's Westminster R.V., and head-quarters, 4th V.B. Queen's Royal West Surrey Regt., New-street, Kennington. The hon. secretaries are Mr. R. R. Sleman, 7, St. Benet's-place, E.C.; and Mr. M. S. Macmanan, 4, Pump-court, Temple.

MIDDLESBROUGH AND CREMATION.—The Town Council recently adopted a resolution in favour of Cremation. In consequence the Mayor (Major Raylton Dixon) has been threatened by an anonymous writer with personal violence for giving an assenting vote to the proposal, and Dr. Malcomson, the medical officer of health for the borough, has had to beat a retreat from an infuriated mob of women for his advocacy of cremation.

HOSPITAL SATURDAY AND SUNDAY IN THE PROVINCES.—The amount paid in during the first three days for the collection made in Birmingham on the 18th inst. was £7657 14*s.* 3*d.*, as against £7019 15*s.* 10*d.* for the same time in the previous year, being an increase of £637 18*s.* 5*d.*—The committee of the Exeter Hospital Saturday Collections for the past year have apportioned to the Devon and Exeter Hospital £333 2*s.* 10*d.*; to the Eye Infirmary a donation of £12 12*s.* and a subscription of £25; to the Exeter Dispensary a donation of £10 and a subscription of £55; to the Dental Hospital £10 10*s.*; and to the Homœopathic Dispensary £12 12*s.*

SALISBURY INFIRMARY.—At a general meeting of the governors, held on Saturday last, it was resolved to make extensive alterations and improvements in connexion with this infirmary, at an estimated cost of £6000; and with the view of assisting the governors and committee of management to raise the necessary funds for the proposed works, a public meeting is to be called inviting persons interested in the undertaking, and especially the Mayor and Corporation, to attend.

METROPOLITAN AND NATIONAL ASSOCIATION OF NURSES.—A meeting of this Association was held last Monday at Grosvenor House. In the unavoidable absence of the Duke of Westminster the Rev. Dacre Craven (hon. secretary) read the report, which announced a most satisfactory advance. Amongst those present were Lord Leigh, Mr. Caine, M.P., Sir Edward Sieveking, Sir Edmund Lechmere, Sir Rutherford Alcock, Dr. Oswald Browne, Miss Gladstone, Lady Aberdare, and many others who have largely helped to develop the movement.

THE LONDON SCHOOL BOARD AND SWEATING.—At a meeting of the School Board on the 16th inst., the following motion, moved by Mr. Foster, was carried by 20 votes against 5: "That the Board shall, from time to time, investigate any charges of sweating which may be brought forward upon the responsibility of any member of the Board, against any person or firm tendering for any contract with the Board; and that, in the event of such charges being established, such contract shall be refused to any such person or firm, upon the ground that the Board declines to encourage in any way the system of sweating."

MISSION TO DEEP-SEA FISHERMEN.—A well-attended meeting in support of this mission was held in Exeter Hall on the 15th inst. The object of the mission is to minister to the welfare of the fishermen in the North Sea and elsewhere, and particularly to supply medicine, surgical appliances, &c. Mission vessels are already stationed with ten fishing fleets, but five more vessels are urgently required for these purposes. 7350 out-patients and 135 in-patients had been treated at sea during the past year. A message received from the Queen, wishing every success to the mission, elicited great applause.

VICTORIA HOSPITAL FOR CHILDREN.—The report of this institution for the past year, just issued, shows that 696 patients were admitted (an increase of nearly 100 on the previous year), and of this number 500 had been discharged cured or relieved; 88 deaths had occurred, against 62 in 1887, but it appears the death-rate had been increased by the alteration of the rule excluding children under two years of age from the benefits of the hospital. As to finance, the total receipts were more by nearly £1300 than in 1887. The silver *fête*, last year, produced over £4000, and had enabled the committee to complete the payments of the new wing, to repay the amount borrowed from the endowment account, and to invest £1000.

HOSPITALS AND THE WORKING CLASSES.—The Marquis of Lorne presided last Wednesday evening, at the Cannon-street Hotel, over a combined general meeting of the Federation of Working Men's Social Clubs and Club and Institute Union, representing over 300 clubs and about 35,000 working men, to consider the relations between hospitals and the working classes. His lordship briefly explained the objects of the meeting, after which Mr. W. H. Sands, a member of the Council of the Club and Institute Union, rose and maintained that the working classes contributed to the hospitals far beyond the proportion of their means; they should be enabled to make their contributions in a more systematic way, and should have their efforts adequately recognised. Working men, he urged, should have a place on the governing bodies; whilst, as to the penny a week scheme, he thought the money required should come from the capitalists, and not from the wage-earning class; otherwise working men should have control of the spending of the money. A series of resolutions were passed denouncing the present system of hospital management as inadequate to the requirements of the time, urging a modification of the present hospital letter system, and referring to the management of the out-patient department, to the assistance of provident dispensaries in their neighbourhood, and the representation of working men subscribers on the governing bodies. It was resolved to forward the above resolutions to all the London hospitals.

SUPERANNUATION.—Mr. George Archer, L.S.A., late medical officer of the Feltwell District of the Thetford Union, has been granted a superannuation allowance of £50 per annum.

ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—On Monday the festival dinner of this old-established institution was held at the Hôtel Métropole, under the presidency of the Duke of Cambridge. A large company attended. The number of new out-patients who applied for relief during the past year was 7571, and in addition 376 patients had their old letters renewed. In the past year 357 operations had been performed, of which 105 were for cataract, 33 for opaque capsule, and 77 for strabismus. The Duke, in proposing the toast of the evening, said the hospital had fifty beds, but half of them were closed for want of money, and he had been informed that for £2000 they might all be filled. The contributions announced by the Secretary amounted to £1520.

BEQUESTS AND DONATIONS TO HOSPITALS.—Mr. Bolland Buck, woolstapler, Bradford, has bequeathed by his will £1000 to the building fund of the Rawson Convalescent Home, and £1000 to form a nucleus of an endowment fund for the institution, and also £1000 to the Bradford Infirmary.—The Clothworkers' Company has given £50, and the parish of Allhallows, Upper Thames-street, 3 guineas, in aid of the funds of the City of London Dispensary.—The late Mr. G. Parker, of Lewisham House, Lewisham, has bequeathed £400 to the Royal Kent Dispensary; £200 each to the Cancer Hospital (Brompton), the Earlswood Asylum for Idiots, the City of London Truss Society, the School for the Indigent Blind (Southwark), the Hospital for the Paralysed and Epileptic (Queen-square), St. Peter's Hospital for Stone (Berners-street), the City of London Hospital for Diseases of the Chest, the Surgical Aid Society, the Hospital for Incurables (Putney), the Deaf and Dumb Asylum (Old Kent-road), and St. Mark's Hospital (City-road).—The annual collections in aid of the West Bromwich District Hospital, made at the various works in the Oldbury district on Saturday last, amounted to £183 2*s.* 10*d.*—The late Sir Thomas Gladstone, Bart., of Fasque, Kincardine, has left £100 each to the Brompton Hospital for Consumption and the Samaritan Hospital, London.—Miss Frances Strickland, late of Apperley, Tewkesbury, has bequeathed £100 to the Worcester Infirmary.

MEDICAL NOTES IN PARLIAMENT.

The Horseflesh (Sale of Food) Bill.

IN the House of Lords, on Monday, the 20th inst., this Bill passed through Committee, and was reported as amended to the House. Amongst several amendments adopted was one having for its object to prevent the customer being cheated by compelling the vendor to post up in a conspicuous place a label announcing that horseflesh was sold on his premises.

Indecent Advertisements Bill.

The Lord Chancellor moved that Clause 5 of this Bill, which prohibited advertisements relating to certain diseases, be omitted, as being altogether too wide. Clause 5, he said, might be held to include some cases that were never in the contemplation of those who framed the Bill; such, for instance, as the *bond-fide* exhibition of an advertisement of a medical work in a bookseller's window.—Lord Herschell suggested the alteration of the clause, but the Marquis of Salisbury thought the better course would be to eliminate the clause, and introduce a new one if necessary. The clause was accordingly omitted and the Bill passed through Committee, and, as amended, was reported to the House.

The Army Medical Staff.

In the House of Commons, on Thursday, the 16th, in reply to Mr. T. Healy, Mr. Brodrick (Financial Secretary, War Office) stated that candidates for the Medical Department of the Navy no longer pass through Netley, so that the question of pay, seniority, and pension, does not arise as regards them. The question as to whether Indian candidates will continue at Netley is still under consideration. While at Netley an officer is only qualifying for his future duties and receives 8*s.* a day as a surgeon on probation; he has no claim to reckon the time so spent towards increased pay or retired pay. Army medical officers in India are, like all other officers, paid in rupees. There cannot be any question of breach of contract, as the pay and allowances are in excess of those of officers serving out of India.

Factory Labour in India.

In reply to Mr. J. Maclean, Sir J. Gorst (Under-Secretary for India) stated that the Indian Government had recommended the introduction of a Bill into the Indian Legislature amending the Indian Factory Act, and enacting, *inter alia*, that the age below which a child cannot be employed in a factory should be raised from seven to nine years; that the hours of work for women should not exceed eleven per diem; and that the local governments should be empowered to make suitable sanitary rules and require inspectors to enforce them, so as to secure the cleanliness and healthiness of the factories. To these recommendations the Secretary of State for India (Viscount Cross) had agreed.

Insanitary Dublin Barracks.

In answer to Mr Wardle, Mr. Brodrick stated that since the beginning of this year four cases of enteric fever had been admitted to hospital from the Richmond Barracks. Mr. Rogers Field was about to report as to the sanitary condition of these barracks, which he has been carefully examining.

Policemen's Truncheons.

On Friday, the 17th, Mr. Stuart-Wortley (Under-Secretary for Home Department), in reply to Mr. Pickersgill and others, explained that the police orders clearly laid it down that a constable may only use his truncheon if he is likely to be overpowered, and in using it he must take care to avoid striking anyone on the head. The arms and legs should be aimed at to disable a prisoner, as being parts of his frame least likely to sustain injury.

Scotch Universities Bill.

Mr. W. H. Smith, in reply to Mr. Marjoribanks and Mr. Esslemont, stated that he hoped to obtain a second reading for the Scotch Universities Bill before the Whitsuntide recess.

Vivisection.

On Monday, the 20th, Mr. John Ellis resumed the adjourned debate on the amendment to the Report of Supply; and in supporting Mr. B. Coleridge's motion to reduce the salary of the Inspector under the Vivisection Act of 1876 by £50, the hon. member enlarged on the cruelties attending vivisection, and further complained that the Act was not administered impartially.—Sir H. Roscoe said he believed that the Act had been, and was being, worked honourably and honestly by all the men of science who had obtained either a licence or a certificate. The abolition of vivisection was a proposition which those who wished to benefit humanity ought not to sanction; both medicine and surgery had benefited in the highest possible degree by the experiments already made, and which experiments had been the means of relieving or mitigating one of the most dreadful diseases to which flesh was heir—epilepsy. Again, the principle of antiseptic surgery now adopted was entirely due to the experiments of Pasteur and others. He would take the case of another of the most dreadful diseases—puerperal fever. In the Vienna Lying-in Hospital the deaths, which used to be 92 per 1000, were reduced in 1863 by antiseptic surgery, based on knowledge obtained by these experiments, to 13 per 1000, and in 1881, by the introduction of stringent antiseptic methods, the death-rate was actually reduced to 4 per 1000. Similarly, at the York-road Lying-in Hospital, the deaths from puerperal fever in 1838 were 28 per cent. The hospital was closed, and afterwards re-opened on strictly antiseptic principles; and the result was that there had been only one death from that complaint in three years, or less than 1 per 1000. The knowledge obtained by these experiments had been of the greatest value to animals themselves, as in the case of anthrax, which could now be actually overcome by inoculation. To stop these experiments would be to stop the progress of science in a very important and most beneficient direction.—Dr. Farquharson bore testimony to the efficiency of the Inspector, who was a man of singularly calm and judicial habit of mind, and of recognised ability; he had from patriotic motives taken up the distasteful and laborious work of this inspectorship, which brought him much wearying discomfort. The House knew pretty well what were the safeguards against abuse. The experiments were almost carried out in public, and open to the inspection of any one. He read a letter from Dr. M'William, indignantly repudiating the ignorant charges of cruelty against him; the animals were profoundly anæsthetised before the experiments, and never allowed to regain consciousness.—Mr. Reid characterised vivisection as a cruel imposture, and condemned the way in which the Act is administered.—Sir John Lubbock pointed out that the medical profession were practically unanimous in admitting the advantages of vivisection to science. Sir James Paget, who was one of the very highest medical authorities, and at the same time one of the kindest and most humane of men, had begged him to assure the Committee that, in his opinion and in that of the overwhelming majority of the medical profession, the experiments which had been made had led to the most important results, that very few of them involved any pain, and that they had already effected an immense diminution of sickness and of suffering.—Mr. Stansfeld criticised the Act in some detail, and asked for an assurance that all its provisions were faithfully carried out.—Mr. Stuart-Wortley in a general reply defended the Inspector and the administration of the Act; and on a division the reduction was negatived by 171 to 50, and the vote agreed to.

Cholera in Ganjan.

On Thursday, the 23rd, Sir J. Gorst, replying to Mr. Bradlaugh, said that according to a telegram he had received from India, the deaths from cholera in Ganjan amounted to about 1000 weekly, but there had been no mortality from starvation.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

DIPLOMA OF FELLOW.

FIRST EXAMINATION.—ANATOMY AND PHYSIOLOGY.

ANATOMY.

At least three of the four questions must be answered.

1. Give an account of the trapezium and the bones of the thumb, including their ossification. Describe the muscular attachments to the several bones and the articulations between them. 2. Describe the large intestine from its commencement to the end of the sigmoid flexure, including its relations and peritoneal connexions. Give an account of the development of the intestinal canal in man. 3. Describe the origin, course, and distribution of the arteries which supply the dura mater, and enumerate the communications between the extra- and intra-cranial venous circulations. 4. Describe the cutaneous nerve-supply of the buttock and thigh.

PHYSIOLOGY.

At least three of the four questions must be answered.

1. Describe a segment of the spinal cord with its roots, paths, and immediate connexions; giving the functions of the parts mentioned, as far as they have been ascertained. 2. Describe the histological appear-

ances and physiological properties of the different forms of muscle fibre found in the human body. 3. State how the equilibrium of the human body in the erect posture is maintained. What is the nervous mechanism concerned in this, so far as at present known? 4. Describe the development of the amnion and allantois (not including the placenta).

SECOND EXAMINATION.

PATHOLOGY, THERAPEUTICS, AND SURGERY.

All four questions must be answered.

1. Enumerate the several malformations of the lower end of the large intestine. Explain their occurrence, and describe the operative treatment you would adopt for each. 2. Discuss the diagnosis and treatment of injury of the vertebral column in the mid-dorsal region. 3. Give the causes, pathology, symptoms, and treatment of acute traumatic tetanus. 4. What are the causes of acute intestinal obstruction (excluding external hernia)? Give their differential diagnosis and appropriate treatment.

Appointments.

Successful applicants for Vacancies, Secretaries of Public Institutions, and others possessing information suitable for this column are invited to forward it to THE LANCET *Office, directed to the Sub-Editor, not later than 9 o'clock on the Thursday morning of each week for publication in the next number.*

ABBOTT, F. C., L.R.C.P., M.R.C.S., has been reappointed House Surgeon to St. Thomas's Hospital.

ANDERSON, G. R., L.R.C.P., M.R.C.S., has been reappointed Assistant House Physician to St. Thomas's Hospital.

BARWISE, SYDNEY, M.R.C.S., L.S.A., has been appointed Medical Officer for the Borough of Blackburn.

BIGGAM, JOHN, M.A., M.B., C.M. Edin., has been reappointed Medical Officer of Sedgley, Staffordshire.

BRISTOWE, H. C., L.R.C.P., M.R.C.S., has been appointed Assistant House Surgeon to St. Thomas's Hospital.

BROCKLESBY, R., L.R.C.P. Edin., M.R.C.S., has been reappointed Medical Officer of Clee-with-Weelsby Union District.

BROWN, C., L.R.C.P., M.R.C.S., has been reappointed House Surgeon to St. Thomas's Hospital.

BROWNE, T. J., M.B. Dub., L.R.C.S. Edin., has been appointed Medical Inspector of the Irish Local Government Board.

BROWNLOW, EDWIN, L.R.C.P., L.R.C.S. Edin., has been appointed Medical Officer of the Northern District, Lancaster Union.

BULSTRODE, H. T., B.A., M.B., B.C. Cantab., L.R.C.P., M.R.C.S., has been appointed Clinical Assistant for Diseases of the Skin to St. Thomas's Hospital.

CHAMBERS, A. B., M.D., M.Ch., L.M. Irel., has been reappointed Medical Officer of Long Eaton Union District.

CLARKSON, WM., L.R.C.P. Edin., L.F.P.S. Glasg., has been reappointed Medical Officer of Morpeth Rural and Union District.

CODD, ARTHUR F. G., F.R.C.S. Eng., San. Sci. Cert., and M.B. Durh., has been appointed Public Vaccinator and Medical Officer of the No. 1 District of the Bromley Union, and Medical Officer of Health of the Bromley Urban District, vice R. B. Bothamley, M.R.C.S., deceased.

COLLINGWOOD, J. E., L.R.C.P. Edin., M.R.C.S., has been appointed Medical Officer of the Burton Coggles District, Grantham Union.

COPELAND, W. H. L., M.B. Cantab., L.R.C.P., M.R.C.S., has been reappointed Non-resident House Physician to St. Thomas's Hospital.

COWEN, T. P., L.R.C.P., M.R.C.S., has been appointed Resident House Physician to St. Thomas's Hospital.

COWIE, JOHN, M.B., C.M. Aberd., has been appointed Medical Officer of the Second District, Devizes Union.

CRISP, E. H., L.R.C.P., M.R.C.S., has been reappointed Clinical Assistant for Diseases of the Skin to St. Thomas's Hospital.

EDRIDGE-GREEN, F. W., M.B., B.S., M.R.C.S., L.R.C.P., has been appointed a Member of the International Code of Signals Committee by the Board of Trade.

EVANS, O. C. P., M.B. Durh., L.R.C.P. Lond., M.R.C.S., has been appointed Medical Officer of No. 2 Kidderminster Union District, and Public Vaccinator of the Borough.

FAWSSETT, F., L.R.C.P., M.R.C.S., has been appointed Resident Accoucheur to St. Thomas's Hospital.

GALLOWAY, WALTER, L.R.C.P., L.M., L.R.C.S. Edin., has been appointed Medical Officer and Public Vaccinator of the Birtley Division of the Chester-le-Street Union.

GARNHAM, G. J. W., L.R.C.P., L.R.C.S. Edin, has been appointed Medical Officer of Smalley District, Belper Union.

HARFORD-BATTERSBY, C. F., L.R.C.P., M.R.C.S., has been appointed Clinical Assistant for Diseases of the Eye to St. Thomas's Hospital.

HELLIER, JOHN B., M.D. Lond., has been appointed Lecturer on the Diseases of Women and Children in the Yorkshire College, Victoria University, vice Dr. James Braithwaite, resigned.

JAMES, C. H., L.R.C.P., M.R.C.S., has been reappointed House Surgeon to St. Thomas's Hospital.

LAWS, W. G., M.B., C.M. Edin., has been reappointed Clinical Assistant for Diseases of the Eye to St. Thomas's Hospital.

LEWITT, FREDK. WM., M.R.C.S., L.R.C.P., has been appointed Medical Officer of the North St. Margaret's District, Leicester Union.

LOANE, JOSEPH, M.R.C.P., &c., has been appointed by the Local Government Board to be a Teacher of Vaccination.

MANNERS, W. F., M.R.C.S., L.S.A., has been appointed Clinical Assistant for Diseases of the Throat to St. Thomas's Hospital.

MARTIN, C. J., M.R.C.S., L.S.A., has been appointed Clinical Assistant for Diseases of the Ear to St. Thomas's Hospital.

MILTON, F. R. S., L.R.C.P., M.R.C.S., has been appointed Assistant House Surgeon to St. Thomas's Hospital.

MITCHELL, C. J. C., M.D. Brussels, M.R.C.S., has been appointed Medical Officer of the Workhouse, Birmingham.

SOLLY, R. V., M.B., B.S. Lond., L.R.C.P., M.R.C.S., has been reappointed House Surgeon to St. Thomas's Hospital.

STEVENS, W. H., L.R.C.P. Lond., M.R.C.S., has been reappointed Medical Officer of Droitwich Borough.

TURNEY, H. G., M.B., B.Ch. Oxon., L.R.C.P., M.R.C.S., has been reappointed Resident House Physician to St. Thomas's Hospital.

WALTERS, F. R., M.D. Lond., M.R.C.P., has been appointed Physician to the City Dispensary, vice Dr. Newsholme, resigned.

WATERWORTH, T. H., M.D. Aberd., M.R.C.S., L.S.A., has been reappointed Medical Officer of St. George-the-Martyr, Southwark.

Vacancies.

For further information regarding each vacancy reference should be made to the advertisement.

BELGRAVE HOSPITAL, Gloucester-street, S.W.—House Surgeon for six months. Salary at the rate of £30 per annum, with board and residence.

BOLTON INFIRMARY AND DISPENSARY.—Junior House Surgeon. Salary £100 per annum, increasing by £10 per annum to £150, with furnished apartments, board, and attendance.

CITY OF LONDON HOSPITAL FOR DISEASES OF THE CHEST, Victoria-park, E.—House Physician for six months.

COUNTY CLARE INFIRMARY, Ennis.—Surgeon. Salary not exceeding £94 a year, with residence attached.

DEACONESSES' INSTITUTION AND HOSPITAL, Tottenham.—Resident House Surgeon. Salary £80.

GENERAL INFIRMARY AT GLOUCESTER AND THE GLOUCESTERSHIRE EYE INSTITUTION.—House Surgeoncy. Salary £100 per annum, with board, lodging, and washing.

NORTH-EASTERN HOSPITAL FOR CHILDREN, Hackney-road, E.—Junior House Surgeon, for six months, at a salary of £30.

NORTH LONDON CONSUMPTION HOSPITAL, Hampstead and London.—Physicianship.

NORTH-WEST LONDON HOSPITAL, Kentish Town-road.—Dental Surgeon.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—Professors and Lecturers.

SHEFFIELD GENERAL INFIRMARY.—Honorary Assistant Physician.

SUNDERLAND INFIRMARY.—House Surgeon. Salary £80, rising £10 annually to £100, with board and residence.

UNIVERSITY COLLEGE, Liverpool.—Demonstrator in Physiology. Salary to commence at £120 per annum.

WEST RIDING ASYLUM, Wadsley, near Sheffield.—Pathologist. Salary £100 per annum, rising £10 a year up to £150, with board, &c.

WILTS COUNTY ASYLUM.—Second Assistant Medical Officer. Salary £100 per annum, with board, residence, attendance, and washing.

Births, Marriages, and Deaths.

BIRTHS.

DOBSON.—On the 20th inst., at Cumberland House, Hanwell, the wife of Leonard C. T. Dobson, M.D. Lond., of a son.

GOSSE.—On the 19th inst., at Eccleshall, Staffordshire, the wife of Hope Wilkes Gosse, M.R.C.S., L.R.C.P. Ed., of a son.

HANLY.—On the 7th inst., at Buenos Ayres, the wife of Edward Hanly, M.D., of a daughter.

LAMB.—On the 20th inst., at Kensington-park-gardens, W., the wife of W. H. Lamb, M.B. Lond., of a daughter.

WELSFORD.—On the 7th inst., at Chaucer's House, Woodstock, the wife of George Frederic Welsford, M.B., of a son.

WHITCOMBE.—On the 18th inst., at Westerham, Kent, the wife of C. H. Whitcombe, F.R.C.S.E., of a son.

MARRIAGE.

EDWARDS—LYBBE.—On the 15th inst., at St. Mary's Parish Church, Wallingford, Charles Wright Edwards, M.R.C.S., L.R.C.P. Lond., of The Chalet, Mill-hill, N.W., to Sarah, widow of the late W. R. Lybbe Powys Lybbe, Esq., of The Croft, Wallingford, Berks.

DEATHS.

ARMSTRONG.—On the 5th inst., suddenly, at sea, Sidney Joseph Armstrong, L.K.Q.C.P.I., M.R.C.S., aged 27.

DROSIER.—On the 13th inst., at Parker's Piece, Cambridge, William Henry Drosier, M.D., Senior Fellow of Gonville and Caius College, aged 77.

FALLS.—On the 22nd inst., at Bournemouth, William Stewart Falls, M.D., F.R.C.P., aged 64.

PATERSON.—On the 11th inst., at Leith, Robert Paterson, M.D., F.R.C.P. Edin., aged 76.

PERKS.—On the 19th inst., at San Salvador, Clarendon-road, Southsea, Edward Rogers Perks, M.R.C.S. and L.S.A. Eng., aged 72 (late of St. George's-square, Portsea). Friends will please accept this intimation.

WHITLING.—On the 30th March, in the Indian Ocean, on board s.s. *Orient*, on a voyage with his wife to Australia for his health, Henry Townsend Whitling, of Croydon, M.R.C.S.E., L.S.A., F.R.M.S., after a few days' illness, of heart disease, greatly accelerated by unusual and intensely hot weather, aged 56; very dearly loved by his wife, seven children, relations, and a very large circle of friends, and deservedly respected and esteemed by everyone who knew him.

N.B.—A fee of 5s. is charged for the Insertion of Notices of Births, Marriages, and Deaths.

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET Office, May 23rd, 1889.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radia in Vacuo.	Maximum Temp. Shade.	Min. Temp	Rainfall.	Remarks at 8.30 A.M.
May 17	29·95	E.	54	52	86	68	49	..	Overcast
,, 18	29·96	W.	55	51	105	65	51	..	Cloudy
,, 19	29·94	S.W.	58	56	72	61	56	·06	Raining
,, 20	30·04	N.E.	56	54	100	66	53	·19	Hazy
,, 21	30·10	N.E.	00	55	109	71	54	..	Hazy
,, 22	30·02	E.	62	59	114	81	55	..	Hazy
,, 23	29·76	W.	69	63	112	81	60	..	Hazy

Notes, Short Comments, & Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editors."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for insertion or for private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe or recommend practitioners.

Local papers containing reports or news paragraphs should be marked and addressed to the Sub-Editor.

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "to the Publisher."*

We cannot undertake to return MSS. not used.

THE PRACTICE OF ENGLISH MEDICAL MEN IN SWITZERLAND.

A SMALL PAMPHLET has just been published, giving an account of the struggle which some English practitioners have been carrying on with the Cantonal authorities in order to be allowed to practise amongst their own countrymen in Switzerland without being obliged to pass the Swiss State examination. Special leave had been granted in the cases of one or two gentlemen who from exceptional circumstances had established a claim to indulgent treatment; but it appears that now an attempt is being made to reopen the question before the Grand Council of the Canton of the Grisons, some of the Swiss medical men being very much averse to the concession already granted, on the ground, nominally at least, that few British diplomas are equal to the Swiss ones.

M.B.—According to the present state of the Treasury regulations a medical man cannot recover fees or hotel and other expenses for attendance at the assizes on Sundays. There can be no doubt that by reason of these regulations a great injustice is done to medical witnesses. To say the least, the court officials ought to have a discretionary power in the matter.

Dr. J. P. Ferguson.—Inhalations of carbolic acid have long been in vogue in the treatment of whooping-cough.

A NEW METHOD OF TREATING DIPSOMANIA.

To the Editors of THE LANCET.

SIRS,—It may be of interest to your readers to introduce to their notice a new method of treating the above disease. The treatment has been so successful in my hands that I feel justified in placing it before the profession, in order that they may try it for themselves.

I have a record of nine cases, four females and five males, all of which were of long standing and severe in character (in two there had been delirium tremens). The length of treatment varied from ten days to a fortnight; one case lasted three weeks. The change brought about is a positive loathing for alcohol, which is induced soon after the treatment is commenced, and which has in these nine cases remained. The general health has recovered, and also the nervous system; the patients express themselves as feeling quite well.

The treatment consists of the hypodermic injection of strychnin—one grain dissolved in 200 drops of water; of this five minims are injected once in twenty-four hours. At the same time, of course, hygienic (massage, baths, &c.) and moral influences (temperance surroundings, &c.) are brought to bear upon the patient.

I think your readers will find the remedy worthy of trial; and if the treatment is as successful in other hands as it has been in mine, it may develop into the recognised method of treatment. I cannot speak too highly of it; the advantages I claim for it are simplicity, rapidity, and permanency. I am, Sirs, yours faithfully,

Brighton, May 6th, 1889. FRED. W. ALLWRIGHT, M.D., &c.

"ELECTRIC LIGHT FOR LONDON."

A CORRESPONDENT addresses us in the following terms on the subject of our remarks under this heading which appeared in THE LANCET of the 4th inst. (p. 907):—

> "There is one point which has not been reported with sufficient prominence in connexion with the above inquiry, and also rather overlooked in the interesting article in THE LANCET of May 4th. It is that in conjunction with the 'alternating transformer' scheme the utilisation of the current is put out of court both for charging storage batteries and motive power purposes. As affecting the profession, these points have considerable importance, as the portable storage battery is undoubtedly destined to oust the troublesome and uncleanly 'primary' battery for ordinary cautery and surgical work, and the utilisation of small electro-motors would undoubtedly be a great addition to a surgeon's and dentist's operating room. Moreover, judging by the success the storage system of supply has hitherto met in the only really complete stations in London—i.e., Chelsea and Kensington—it is by no means certain that the alternating mode of producing electric current is destined to become popular. A very interesting paper on the adaptation of storage in a popular form will be found in the current number of the Society of Arts Journal, by Mr. W. H. Preece, the well-known electrician to the Post Office."

We think that if our correspondent will glance again over the article in question he will perceive that the points he mentions are really touched in the remarks to which he has referred, though not so pointedly or with so full detail as in his letter. In what he says about the advantage of a current which can be employed to charge a portable battery we entirely concur. For mechanical purposes also the electric current possesses merits which it is at present difficult to appreciate, so entirely are we without experience of them. The noise, dirt, and trouble incidental to the employment of steam or compressed air on even the smallest scale have entirely disqualified either of these vehicles for the task of transmitting power for domestic purposes, while water under pressure is too expensive for the purpose; but the silence, simplicity, cheapness, and freedom from dirt of electrical appliances will make it not only practicable, but also advantageous, to have mechanism at work in any room of a house, and for any purpose, however insignificant, which mechanical action is adapted to subserve. Then it will, we think, be found that such purposes as our correspondent suggests are by no means among the least important to which the new agent can be applied.

Mr. R. G. Jack.—A copy of the tariff could doubtless be obtained of the hon. sec. of the Association, Dr. Wahltuch, 60, King-st., Manchester.

"AMBULANCE LECTURES."

To the Editors of THE LANCET.

SIRS,—In THE LANCET of the 11th inst. there is a letter from Mr. W. Wickham, referring to the recent circular issued by the Chief Secretary of the St. John Ambulance Association denying the right of *entrée* to examinations of their classes by lecturers. I was not aware of this change in the "Instructions to Lecturers" until I read your correspondent's letter, and no doubt Sir Herbert Perrott will reply himself to the query which Mr. Wickham might perhaps have addressed to St. John's Gate rather than to you. But, as he has made the instructions to the St. John Ambulance Staff a matter of discussion in your journal, perhaps you will permit your readers to hear the other side.

I am a lecturer of ten years' standing, and have been on the staff of the St. John Ambulance Association examiners for nearly eight years. As a lecturer I have never been present at the examination of one of my classes, and have never yet had reason to criticise the conduct of the examination or its results. As an examiner I have sometimes been met by the lecturer in the examination room; but I am satisfied that the candidates would in every case have done better if they had not been embarrassed by the gestures of some enthusiastic lecturers, who signified approbation or otherwise of the questions put and the answers given. I can answer for my colleagues, that no one need fear a want of fair play.

I am, Sirs, yours faithfully,

Leinster-square, W., May 16th, 1889. A. SYMONS ECCLES.

DENTITION IN UTERO.

To the Editors of THE LANCET.

SIRS,—In a recent number of the *Nineteenth Century* Mr. Oscar Wilde propounded the theory that while fiction very seldom held up the mirror to nature, nature was continually reproducing fiction. Yesterday I attended a confinement, the case being one of foot presentation, and this morning the nurse called my attention to the baby, who was born with a well-developed incisor tooth. I immediately thought of the following quotation, and only hope that the little one will not resemble Richard III. in other particulars:—

> "Indeed, 'tis true that Henry told me of;
> For I have often heard my mother say
> I came into the world with my legs forward:
> Had I not reason, think ye, to make haste,
> And seek their ruin that usurp'd our right?
> The midwife wonder'd; and the women cried,
> 'O Jesus, bless us, he is born with teeth!'"
> (King Henry VI., Part III., Act v., Scene 6.)

I am, Sirs, your obedient servant,

Southsea. ALBERT BENTHALL.

SUBSTITUTE FOR SAFFRON.

IN overhauling the contents of a druggist's shop in Germany, the inspector came across a bottle labelled "Saffron Substitute," and had it examined to find out whether it was of a harmless character or otherwise. It was found to consist of dinitrocresol, and even in small doses proved fatal to rabbits and dogs. A case of poisoning by this substance has, too, been published in a German medical journal; consequently, it is important to take care that it is not used as a substitute for saffron.

Mr. E. Jones (Ealing).—The matter will be noticed when we receive the report.

Alpha.—The paper is marked for insertion.

MEDICAL PRACTICE AT THE TRANSVAAL.

To the Editors of THE LANCET.

SIRS,—It may interest some of the readers of your valuable journal to learn a few of the difficulties and drawbacks with which a medical practitioner in this part of the world has to contend.

Homœopathy is popular, and much practised by the farmers and missionaries, the latter of whom are very plentiful; I believe some are medical missionaries, but cannot speak positively on this point. I asked a very intelligent member of the non-medical order one day whether he believed that diagnosis ought to be a necessary prelude to satisfactory treatment. He answered, "Oh, yes"; and on my asking him how he got on, I was met by the following: "When I started some years ago, it was rather difficult; but now I manage all right." He explained himself more particularly by saying that he himself did not pretend to be exact, but was quite content with general diagnosis. There are always a number of so-called "travelling doctors," who scour the country in search of patients, and whose sole qualification appears to be a power of charging heavily. This is one instance which came to my knowledge lately. Mr. Quack arrived one afternoon at the house of a farmer, whose wife was already under qualified medical treatment for, I believe, some trivial ailment. He offered his services, but was told that help had already been called in. He then asked to see the medicine, and immediately pronounced it very good, but much too strong for the lady's constitution, and recommended his own. His apparent power to judge of the quality of medicine by the smell, and the delicate compliment to the robust old lady's nerves, probably combined to gain the day; for the upshot was that he supplied a few bottles of medicine, and handed in an account for £14 7*s.* On a reduction being suggested by the astonished husband, the traveller produced his note-book, and went through a series of calculations, finally reducing the amount to £14. These men do well; though, I fancy, the farmers are beginning to suspect them, for I heard the class called the other day "geld-zœkers" (money-seekers). A Boer, if suffering from anything requiring operation, is very fond of seeking advice with regard to it, and of making minute inquiries as to how it is to be done, &c., and, lastly, the fee he will have to pay. At the mention of this, whatever it may be, there is a heavy and stolid expression of astonishment. He then says: "Ik denk ik zal dat lat doen" (I think I'll have it done), and fixes a time to call again to make arrangements. Needless to say his exit is final, and he is seen no more. It is, of course, his dull acuteness; he gets an opinion gratis. I may remark that a Boer does not understand tendering a fee for a medical opinion. He merely pays for the medicine, and the greater the quantity of the latter the better pleased is he. Some of the old women have wonderful confidence in their own power of accounting for the presence of disease. I was one day called in to examine a man who was supposed to be "possessed" by snakes and lizards (he had signs and symptoms indicating degeneration of the anterior cornual cells), and was in the act of bending over him, when I received a terrific thud on the shoulder, very nearly precipitating me on to the unfortunate patient. I thought for a moment that somebody was annoyed with me; but on recovering myself, I was confronted by a heavy, big-boned woman with arms akimbo. I experienced a sense of relief, immediately followed by despair; for she was evidently burning to let her tongue loose. She repeated her terrific thud on the same spot of the same shoulder, and shouted, "Ik zal u sagen wat de kwal is" (I'll tell you what the disease is), and immediately went into a history concerning her husband, which it was simply impossible by any brain effort to follow. When a patient is dying, or in great danger, there is immediately convened an assembly of friends in the room and outside, whose chief *rôle* is to recapitulate to each other the details of the death of some mutual friend, and to compare his sufferings with those of the present unfortunate—a process varied now and again by a hopeless look at the sick person (who is perhaps quite conscious), accompanied by some such expression as "Dat kan nu niet lang wiss niet" (It can't be long now). Should there be an improvement in the patient's condition, the congregation disappears as quickly as it came, and apparently all interest vanishes until the jaws of death again gape.

I will conclude with a short list of remedies, which are trusted in with infinitely more faith than used to be vested in the F.A.C. and R.C.P. panacea of my old hospital:—1. Cow-dung poultices. 2. Stink blaar (Datura stramonium) leaves applied for the relief of pain. These act well, and are often used. 3. Prickly pear leaves skinned and applied. 4. For children: A young goat killed and opened, the child being put in bodily after removal of the viscera. A good poultice, I fancy. 5. Rimpis (threads) of eel-skin worn round the painful joints in chronic rheumatism. This was described to me by a man who was wearing one round almost every joint of his body as being a splendid remedy. I hope this will not cause a rise in the price of eels. 6. Rimpis of the tanned skin of a tame goat worn as above for sprains &c. 7. The finely chopped hair of a black cat, which should not have the faintest trace of white about it. A remedy for convulsions. 8. A spoonful of dog's blood taken from the ear for "buur en de mag" (inflammation of bowels). 9. For snake-bite, repeated fowl poultices. The Boers also believe that the moon exercises an influence over dropsy. It is supposed to get worse at full moon. Endemic hæmaturia (Bilharzia hæmatobia) is common among the children here. The popular belief is that they catch it while bathing, which is very probable. In a case under my care this was probably the *fons et origo* of a pyelitis which had lasted several years.

I may end by remarking that there would be a splendid field for medical practice here if there could but be inculcated a more general belief in modern and rational doctrines.

I am, Sirs, yours faithfully,

Rusternberg, Transvaal. WALTER H. HAW, B.A., M.R.C.S. Eng.

TOO MANY DOCTORS.

To the Editors of THE LANCET.

SIRS,—The opinion expressed in a recent article in THE LANCET that there are too many doctors seems to be spreading to the community, who will probably imagine that they are justified in promoting the diminution of the number of the doctors by diminishing their rate of payments to them. I make out, from a comparison between the number of registered practitioners and the total population of Great Britain, that there is a proportion of about one doctor to 1450 individuals. We can easily calculate how many of these 1450 will die in the course of a year, how many births there will be amongst them, and generally what amount of care and attention will be required of a "doctor" if he does his duty from day to day in relieving sufferings, in treating injuries, in preventing illness, whether from infectious or other preventible causes; briefly, in doing all that can contribute to the health and so to the wealth of the community, and lacking which loss and trouble must be experienced by it. Assuming, as one is bound to do in considering this question, that the medical profession is of absolute advantage to the community by the exercise of intelligence, skill, and scientific knowledge, there ought to be no difficulty in deciding whether the community is overstocked or not with doctors. I conclude, from the article in THE LANCET, that one doctor for 1450 individuals is more than is wanted. There is no doubt that the community could exist without doctors at all, but I cannot help thinking that instead of having only one for 1450 people, it would be of pecuniary advantage to have two, if not three; for if we reflect on how many individuals in a population of 1450, young and old, injured and dying, mothers and infants, require to be seen by the doctor in one day, I am satisfied that it would be perfectly impossible for a man of average strength and health to discharge efficiently such duties as would devolve upon him. It may be said that the poor do not require much attention, but it would be easy to show that it pays better to keep the poor well than have them ill and a burden to others. In this respect they differ from the rich. It may be true, from the doctor's point of view, that the fewer of them there are the better; but I am sure that the article in THE LANCET was not written in this spirit, and that the interests of the community are jealously guarded by your journal. If I am wrong in pressing upon you the view that the public require guidance in this matter, and is ignorant of what is for its good, pray excuse me for intruding upon your space,—Yours, &c.,

JUSTITIA.

*** There is a high sense in which our correspondent is quite right. The community would be better off for much more medical attention, and especially the poor. But for this it is not necessary to multiply medical men beyond the point at which they can be maintained as professional men should be maintained.—ED. L.

TRIPLETS.

To the Editors of THE LANCET.

SIRS,—On the evening of May 18th, 1889, I was called to attend Mrs. M——, aged thirty-three, the wife of a joiner, in her sixth confinement, all the five previous labours having proved normal in every respect. There is no family history of multiple pregnancies. On vaginal examination the os was found fully dilated, a foot presenting; so, rupturing the membranes, I easily delivered the first, a medium-sized male child. Tracing the cord up, a head and foot were felt, thus leading me to believe that I had to do with a twin and transverse presentation. The second bag was ruptured, a foot brought down, and the delivery of the largest male child effected. Pressure on the uterus brought forth a third, the smallest, fœtus, head first, and enveloped in its own separate caul. This was speedily torn open, and its captive liberated. The whole labour was terminated in less than a quarter of an hour, and all signified their advent into the world by a lusty cry. Thus there were triplets, all males, and each enveloped in its own amniotic sac. Two placentæ were now expressed, the first and more ponderous bearing two tributary cords; the second, one. The hæmorrhagic loss was trivial. Mother and children are doing, and look likely to do, well.

I am, Sirs, yours truly,

Barnsley, Yorkshire, May 19th, 1889. J. A. WETHERELL, M.B.

ERRATUM.—In our report of the meeting of the Obstetrical Society last week, p. 989, part of the remarks attributed to Dr. William Duncan should have followed the name of Dr. Matthews Duncan. Thus the twenty-first line from the bottom of the first column of the page should read: "Dr. Matthews Duncan found that such a case," &c.

COMMUNICATIONS not noticed in our present number will receive attention in our next.

COMMUNICATIONS, LETTERS, &c., have been received from—Mr. Barker Smith, Dulwich; Mr. Ellis, Cork; Dr. Macgregor, Aberdeen; Dr. T. Oliver, Newcastle; Dr. Stephenson, Grimsby; Mr. Johnston, Sutton Bridge; Mr. V. A. Applin, London; Mr. Donaldson; Messrs. Rayner and Cassell, London; Mr. Qualtrough, London; Dr. Brachet, Aix-les-Bains; Mr. H. W. Crosse, London; Mr. D. Richardson, Newhaven; Dr. W. J. Collins, London; Dr. M. Greenwood, London; Mr. Alban Doran, London; Mr. J. H. Carter, Bexley; Mr. Bourn; Dr. Dawson Burns, London; Mr. J. P. Ferguson, Knoydart; Messrs. Holbrook and Son, Portsmouth; Mr. Shirtliff, Kingston; Mr. Heatherley, New Ferry; Mr. A. S. Eccles, London; Dr. Blumer, Stafford; Dr. Sidney Phillips, London; Herr Fischer, Jena; Mr. Nutt, London; Dr. Hale White, London; Mr. A. Wilson, Leytonstone; Mr. Parkinson, County Clare; Mr. Bellamy, London; Mr. C. Chepmell, London; Dr. Prout, Edinburgh; Mr. F. Townsend, London; Dr. Cheadle, London; Mr. A. Benthall, Southsea; Mr. W. Heelas, Wokingham; Mr. Bristed, Bombay; Dr. Wetherell, Barnsley; Dr. Althaus, London; Dr. Mac Mordie, Belfast; Mr. Sisley, London; Dr. H. Campbell, London; Mr. W. J. Forster; Mr. E. Chesshire, Birmingham; Dr. Ridge, Enfield; Mr. W. Oxley, Rotherham; Mr. S. H. Cartwright, London; Mr. C. Stonham, London; Dr. Rentoul, Liverpool; Dr. Sutherland, Glasgow; Mr. H. J. Franks, London; Mr. Johnston, Edinburgh; Mr. Robinson, Sunderland; Dr. Ewart, London; Dr. Badcock, Brighton; Mr. Street, Lancaster; Mr. Horton, Worthing; Mr. Wright, Penzance; Mr. Briscoe, Bolton; Mr. Scriven, Derby; Mr. Campbell, Carlisle; Madame More, Switzerland; Mr. Pigott, Yorks; Mr. Masters, Sussex; Mr. Hensman, Daventry; Mr. Jones, Texas; Mr. Freeman, London; Mr. Hepburn, Bournemouth; Mr. McKinney, Nunhead; N. S.; A Surgeon, Brighton; Beta, Lincolnshire; B. B., London; An Athletic Doctor; University College, Liverpool; A Graduate in Medicine; M. H. W.

LETTERS, *each with enclosure*, are also acknowledged from—Dr. Hanly, Ireland; Mr. Nicholls, Suffolk; Dr. Waters, Liverpool; Messrs. Read and Co., Bristol; Dr. Griffith, Manchester; Messrs. Rowntree and Co., York; Dr. Ralph, Hants; Mr. Jones, Monmouth; Messrs. Oliver and Boyd, Edinburgh; Mr. Campbell, London; Messrs. Cassell and Co., London; Mr. Barber, Sheffield; Mr. Hay, Hull; Messrs. Smith and Son, Manchester; Mr. Somerville, Edinburgh; Mr. Pughe, North Wales; Mr. McBride, Wigtown; Mr. Ward, London; Messrs. Slinger and Co., Bradford; Mr. Sydenham, Bournemouth; Messrs. Smith and Son, Birmingham; Mr. Heywood, Manchester; Messrs. Maciehose and Co., Glasgow; Mr. Hopgood, Middlesbro'; Messrs. Holbrook and Son, London; Mr. Corcoran, Loughboro'; Mr. Macaulay, Kebworth-Harcourt; Mr. Gilyard, Bradford; Mr. Collins, Hackney; Dr. Horne, Scarboro'; Dr. Slater, Newcastle; Mr. Hallett, London; Dr. Taylor Hants; Mr. Lloyd, Carmarthen; Beta, North Wales; Thom, Glasgow; Urban, London; Florence, Yorks; Assistant, Sheffield; Tunbridge Wells General Hospital; D. M., London; Syntax, London; Bedford General Infirmary; Sydney, London; M. R., London; Hants County Asylum, Fareham; Nemo, London; Cyclops, London; Express Dairy Co., London; Alpha, Cornwall; W. C. H., London; Stretton House Private Asylum; Delta, London; A. Z., London; Royal Mail Steam Co.; A. B., Walworth; W., London; B. P., London; Imperial Life Association, London; Medicus, Suffolk; Jeyes' Sanitary Compounds Co., London; Hahneman, London; M. S. D., London; Physician, London; Miss L., London; Saccharine, London; Medicus, Stratford; M.D., Newcastle; Zero, Wimbledon; America, London; Clinique, Salop; Alpha, Newcastle; Royal Mail; Schacht and Co., Clifton.

Sheffield Daily Telegraph, Englishman (Calcutta), Herald and Weekly Free Press, Bury Press, Reading Mercury, Glasgow Herald, Mining Journal, Southwark, Newington, and Bermondsey Ratepayers' Chronicle, Surrey Advertiser, North London Press and Star, Kettering Guardian, Hertfordshire Mercury, Stratford-upon-Avon Herald, South Wales Daily News, The Cambridge Review, Alma Mater, &c., have been received.

Medical Diary for the ensuing Week.

Monday, May 27.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations daily at 10 A.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1.30 P.M., and each day at the same hour.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M., and each day in the week at the same hour.
ROYAL COLLEGE OF SURGEONS OF ENGLAND.—5 P.M. Prof. Charles Barrett Lockwood: On the Morbid Anatomy, Pathology, and Treatment of Hernia.
SOCIETY OF ARTS.—8 P.M. Mr. H. Graham Harris: Heat Engines other than Steam. (Cantor Lecture.)

Tuesday, May 28.

GUY'S HOSPITAL.—Operations, 1.30 P.M., and on Friday at the same hour. Ophthalmic Operations on Monday at 1.30 and Thursday at 2 P.M.
ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 4 P.M.; Friday, 2 P.M.
CANCER HOSPITAL, BROMPTON.—Operations, 2 P.M.; Saturday, 2 P.M.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 2.30 P.M.
ST. MARY'S HOSPITAL.—Operations, 1.30 P.M. Consultations, Monday, 2.30 P.M. Skin Department, Monday and Thursday, 9.30 A.M. Throat Department, Tuesdays and Fridays, 1.30 P.M. Electro-therapeutics, same days, 2 P.M.
ROYAL INSTITUTION.—3 P.M. Prof. E. Ray Lankester: Some Recent Biological Discoveries.
ROYAL MEDICAL AND CHIRURGICAL SOCIETY.—8.30 P.M. Dr. Arnold Schetelig (communicated by the President): On the Presence of Free Uric Acid in the Urine as a Test of the existence of the Gouty State.—Dr. A. Haig: The Influence of Phosphate of Soda on the Excretion of Uric Acid.—Dr. R. L. Bowles: On the Resuscitation of the Apparently Drowned.
SOCIETY OF ARTS.—8 P.M. Mr. James S. Humbird: The Westinghouse Alternating System of Central Station Electric Lighting in the United States of America.

Wednesday, May 29.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour. Ophthalmic Operations, Tuesday and Thursday, 1.30 P.M. Surgical Consultations, Thursday, 1.30 P.M.
ST. THOMAS'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour.
LONDON HOSPITAL.—Operations, 2 P.M.; Thursday & Saturday, same hour.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.; Saturday, 2 P.M. Skin Department, 1.45 P.M.; Saturday, 9.15 A.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M., and on Saturday.
KING'S COLLEGE HOSPITAL.—Operations, 3 to 4 P.M.; Friday, 2 P.M. Saturday, 1 P.M.
CHILDREN'S HOSPITAL, GREAT ORMOND-STREET.—Operations, 9.30 A.M.; Surgical visits on Wednesday and Saturday at 9.15 A.M.
ROYAL COLLEGE OF SURGEONS OF ENGLAND.—5 P.M. Prof. Charles Barrett Lockwood: On the Morbid Anatomy, Pathology, and Treatment of Hernia.
SOCIETY OF ARTS.—8 P.M. Mr. D. G. Hoey: The Science of Ventilation as applied to the Interior of Buildings.

Thursday, May 30.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M. Surgical Consultations, Wednesday, 1.30 P.M. Ophthalmic Operations, Friday, 1.30 P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION.—3 P.M. Prof. Dewar: Experimental Lecture on Chemical Affinity.

Friday, May 31.

ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
ROYAL COLLEGE OF SURGEONS OF ENGLAND.—5 P.M. Prof. Charles Barrett Lockwood: On the Morbid Anatomy, Pathology, and Treatment of Hernia.
SOCIETY OF ARTS.—8 P.M. Mr. John McDougall: Indian Wheats.
ROYAL INSTITUTION.—9 P.M. Prof. Demetri Mendeleef: An Attempt to apply to Chemistry one of Newton's Principles.

Saturday, June 1.

MIDDLESEX HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION.—3 P.M. Prof. W. Knight: The Classification of the Sciences, Historical and Critical. (Tyndall Lecture.)

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